

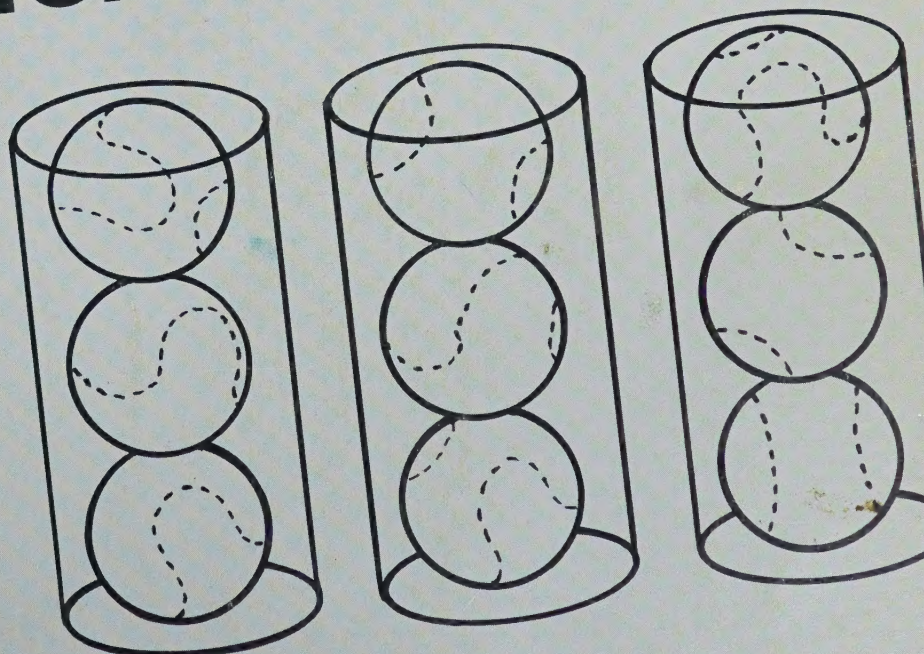
# starting points in mathematics

# 4

## Workbook

### Teacher's Edition

4. 3 tennis balls to a can  
How many cans of  
tennis balls?



CURRICULUM

QA  
135.5  
S79  
1982  
gr.4  
wkbk.  
tch.ed.

CURR



## To the Teacher

This workbook is designed for every unit in the workbook. A tab shows the workbook unit.

For almost every lesson in the workbook. The lesson tab shows the corresponding textbook topics in the textbook. It lists the required skills or conceptual, or evaluative purposes.

The workbook also includes a full-page *Practice* tab at the end of each unit. There is a full-page *Practice* tab at the end of each unit. There is a full-page *Practice* tab at the end of each unit.

Students who are assigned should be those who have the textbook or those who could profit from the review lessons. Review unit topics, mixed-computation word problem sets.

This Teacher's Edition differs from the student's workbook in that it includes these notes and exercise answers in red.

The following illustrates the structure of a lesson that corresponds to a textbook lesson.

- |  |                                   |   |
|--|-----------------------------------|---|
| 1 Lesson title<br>Matches title of corresponding textbook lesson | 2 Code line<br>Textbook/Unit/Page | 3 Diagnostic/instruction box                          |
| 4 Completely-worked example                                      | 5 Partially-worked example        | 6 Decision exercises<br>Check students' understanding |
| 7 Additional practice  |                                   |   |

NAME _____					② SPM4/U3/64-65
<b>① Subtraction, Regrouping with Zeros</b> Subtract.					
<b>③</b> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <b>④</b>  <math display="block">\begin{array}{r} 2110 \\ 1. \cancel{3000} \\ \underline{2863} \\ 137 \end{array}</math> </div>	<b>⑤</b> $\begin{array}{r} 4110 \\ 2. \cancel{9500} \\ \underline{3298} \end{array}$	<b>⑥</b> $\begin{array}{r} 3. 4000 \\ \underline{1374} \end{array}$	$\begin{array}{r} 4. 6030 \\ \underline{3165} \end{array}$	$\begin{array}{r} 5. \$7200 \\ \underline{426} \end{array}$	
<b>⑦</b> $\begin{array}{r} 6. 6020 \\ \underline{2199} \end{array}$	$\begin{array}{r} 7. 1020 \\ \underline{586} \end{array}$	$\begin{array}{r} 8. 7000 \\ \underline{1032} \end{array}$	$\begin{array}{r} 9. 8101 \\ \underline{3717} \end{array}$	$\begin{array}{r} 10. \$904 \\ \underline{349} \end{array}$	
$\begin{array}{r} 11. 8070 \\ \underline{5524} \end{array}$	$\begin{array}{r} 12. 8005 \\ \underline{4987} \end{array}$	$\begin{array}{r} 13. 502 \\ \underline{374} \end{array}$	$\begin{array}{r} 14. 9030 \\ \underline{5273} \end{array}$	$\begin{array}{r} 15. \$3050 \\ \underline{885} \end{array}$	

Continued on the inside of the back cover.

Ex LIBRIS  
UNIVERSITATIS  
ALBERTAENSIS



Alberta Heritage Savings Trust Fund  
Library Development Grant

atics 4  
it in the  
ing of each

on in the  
ification.

rice with the  
of the  
, instruc-

units there  
t. At the end  
skills or  
ge *Practice*

k lessons  
aterial in the  
t, however,  
er these  
or provide

Workbook for

**starting points  
in mathematics**

Level 4

**GINN AND COMPANY**  
EDUCATIONAL PUBLISHERS



## Contents

Unit 1	Numeration	1
Unit 2	Addition	10
Unit 3	Subtraction	16
Unit 4	Geometry	22
Unit 5	Multiplication	28
Unit 6	Division	36
Unit 7	Geometry, Graphing	42
Unit 8	Decimals	52
Unit 9	Measurement	60
Unit 10	Multiplication	70
Unit 11	Division	76
Unit 12	Measurement	84
Unit 13	Fractions, Decimals	92
Checking Up		98

© Copyright, 1982, by Ginn and Company, a Division of Xerox Canada Inc.  
All Rights Reserved. No part of the material covered by this copyright may be  
reproduced in any form or by any means of reproduction.

C95137

ISBN 0-7702-0847-9

Printed in Canada.

A B C D E F G • 08765432



**Numbers to 999**

Write the standard form for each.

hundreds	tens	ones
2	8	6

 286

hundreds	tens	ones
3	0	9

 309

hundreds	tens	ones
5	3	2

 532

4. nine hundred four 904

5. four hundred seventy  
4706. eight hundred nineteen  
819

What does the 6 mean in each numeral?

7. 651 6 hundreds

8. 867 6 tens

9. 346 6 ones

Write the standard form for each.

hundreds	tens	ones
7	1	5

 715

hundreds	tens	ones
8	9	7

 897

hundreds	tens	ones
5	2	7

 527
13. three hundred six  
30614. six hundred twenty-eight  
62815. two hundred thirty  
230

What does the 8 mean in each numeral?

16. 180 8 tens

17. 823 8 hundreds

18. 628 8 ones

SPM4/U1/6-7

**Numbers to 9999**

Write the standard form for each.

th	h	t	o
1	7	3	5

 1735

th	h	t	o
4	0	5	9

 4059

3. one thousand four hundred ten 1410

4. two thousand sixty-eight 2068

What does the 5 mean in each numeral?

5. 7514 5 hundreds

6. 5920 5 thousands

7. 6852 5 tens

Write the standard form for each.

th	h	t	o
3	4	8	2

 3482

th	h	t	o
2	1	0	6

 2106
10. four thousand nine hundred one  
4901

11. six thousand seventy 6070

12. three thousand sixty-three  
306313. five thousand five hundred twenty  
5520

What does the 7 mean in each numeral?

14. 6071 7 tens

15. 7352 7 thousands

16. 4751 7 hundreds

17. 9837 7 ones



## Expanded Form

Write the expanded form for each.

1. 2641  $2000 + 600 + 40 + 1$

2. 3406  $3000 + 400 + 6$

3. 8567  $8000 + 500 + 60 + 7$

Write the standard form for each.

4.  $5000 + 400 + 9$  5409

5.  $7000 + 40 + 8$  7048

6.  $9000 + 100 + 70$  9170

Write the expanded form for each.

7. 1982  $1000 + 900 + 80 + 2$

8. 3460  $3000 + 400 + 60$

9. 6057  $6000 + 50 + 7$

10. 5103  $5000 + 100 + 3$

11. 3005  $3000 + 5$

12. 4649  $4000 + 600 + 40 + 9$

Write the standard form for each.

13.  $4000 + 50 + 7$  4057

14.  $6000 + 200 + 8$  6208

15.  $3000 + 80$  3080

16.  $8000 + 300 + 60 + 7$   
8367

17.  $7000 + 200 + 40$   
7240

18.  $9000 + 100 + 30 + 8$   
9138

SPM4/U1/12-13

## Comparing and Ordering Numbers

Use  $>$  or  $<$  to make a true statement.

1. 5346  $>$  5254

2. 6457  $>$  6257

3. 7756  $<$  7765

List from least to greatest.

4. 6434, 4634, 4463, 6443  
4463, 4634, 6434, 6443

5. 1620, 1062, 1602, 1026  
1026, 1062, 1602, 1620

6. 7544, 7464, 7458, 7446  
7446, 7458, 7464, 7544

Use  $>$  or  $<$  to make a true statement.

7. 6767  $>$  6677

8. 8201  $<$  8210

9. 7936  $>$  7846

10. 9102  $>$  9101

11. 4001  $<$  4010

12. 4477  $<$  4747

List from least to greatest.

13. 8798, 8788, 8797, 8897  
8788, 8797, 8798, 8897

14. 5795, 5579, 5600, 5759  
5579, 5600, 5759, 5795

15. 3124, 1344, 3144, 3142  
1344, 3124, 3142, 3144

16. 8608, 8606, 8060, 6806  
6806, 8060, 8606, 8608

17. 2522, 2552, 255, 2525  
255, 2522, 2525, 2552

18. 6090, 6900, 6099, 6009  
6009, 6090, 6099, 6900



## Rounding

Round to the nearest ten.

1. 24 **20**2. 57 **60**3. 82 **80**4. 45 **50**

Round to the nearest hundred.

5. 562 **600**6. 712 **700**7. 393 **400**8. 250 **300**

Round to the nearest thousand.

9. 8300 **8000**10. 1829 **2000**11. 7362 **7000**12. 1500 **2000**

Round to the nearest ten.

13. 18 **20**14. 84 **80**15. 315 **320**16. 197 **200**

Round to the nearest hundred.

17. 381 **400**18. 693 **700**19. 2449 **2400**20. 1486 **1500**

Round to the nearest thousand.

21. 8300 **8000**22. 1721 **2000**23. 5500 **6000**24. 2932 **3000**

SPM4/U1/16-17

## Ordinal Numbers

Write using numerals.

1. six hundred fourth **604<sup>th</sup>**2. four hundred sixtieth  
**460<sup>th</sup>**3. eight hundred twenty-first  
**821<sup>st</sup>**

Write the words.

4. 291<sup>st</sup>  
**two hundred ninety-first**5. 313<sup>th</sup>  
**three hundred thirteenth**6. 829<sup>th</sup>  
**eight hundred twenty-ninth**

Write using numerals.

7. three hundred twentieth **320<sup>th</sup>**8. nine hundred sixty-sixth **966<sup>th</sup>**9. four hundred thirty-eighth **438<sup>th</sup>**10. two hundred twelfth **212<sup>th</sup>**11. five hundred seventy-second **572<sup>nd</sup>**12. one hundred third **103<sup>rd</sup>**

Write the words.

13. 945<sup>th</sup> **nine hundred forty-fifth**14. 818<sup>th</sup> **eight hundred eighteenth**15. 190<sup>th</sup> **one hundred ninetieth**16. 501<sup>st</sup> **five hundred first**



## Numbers to 999 999

Write the standard form.

1. 83 thousand 526 83 526	2. 399 thousand 15 399 015
3. sixty thousand six hundred five 60 605	4. seven hundred twenty thousand 720 000
5. 400 000 + 20 000 + 400 420 400	6. 70 000 + 3 000 + 20 + 8 73 028

7. 118 thousand 118 000      8. 42 thousand 51 42 051      9. 262 thousand 110 262 110  
 10. five hundred eight thousand ten 508 010      11. two hundred thousand five 200 005  
 12. 100 000 + 6 000 + 200 + 5 106 205      13. 60 000 + 40 + 8 60 048

Write the words.

14. 32 800 thirty-two thousand eight hundred      15. 703 075 seven hundred three thousand seventy-five

What does the 7 mean in each numeral?

16. 127 614 7 thousands      17. 816 719 7 hundreds      18. 790 414 7 hundred thousands

## Comparing and Ordering Numbers

Use > or < to make a true statement.

1. 527 533 > 527 244      2. 612 667 < 621 242      3. 64 259 > 62 999

List from greatest to least.

4. 486 433, 48 888, 489 433, 499 433  
 499 433, 489 433, 486 433, 48 888      5. 84 829, 92 848, 94 809, 94 049  
 94 809, 94 049, 92 848, 84 829

Use > or < to make a true statement.

6. 968 753 > 896 537      7. 699 705 > 698 999      8. 854 499 < 855 899  
 9. 56 889 > 54 899      10. 576 616 > 576 529      11. 471 222 > 417 777

List from greatest to least.

12. 45 678, 46 578, 46 875, 46 857  
 46 875, 46 857, 46 578, 45 678      13. 91 222, 912 022, 91 021, 91 212  
 912 022, 91 222, 91 212, 91 021  
 14. 164 578, 16 475, 160 758, 164 597  
 164 597, 164 578, 160 758, 16 475      15. 328 634, 326 684, 328 464, 328 636  
 328 636, 328 634, 328 464, 326 684



## Practice

Think of a place-value chart to help you answer these questions.

1. What does the 6 mean in 8654?

6 hundreds

2. What does the 3 mean in 43 806?

3 thousands

3. What does the 5 mean in 526 062?

5 one hundred thousands

4. What does the 9 mean in 293 568?

9 ten thousands

Write the standard form.

5. four hundred twenty-nine thousand one hundred sixty 429 160

6. seven hundred eight thousand 708 000

7. 2 thousands 3 tens 4 ones 2034

8.  $300\,000 + 5\,000 + 70 + 5$  305 075

9. 70 thousand 58 70 058

Write the expanded form.

10. 20 560 20 000 + 500 + 60

11. 709 300 700 000 + 9000 + 300

Write the words.

12. 38 380 thirty-eight thousand three hundred eighty

13. 470 074 four hundred seventy thousand seventy-four

Use  $>$  or  $<$  to make true statements.

14. 1918  $>$  1891

15. 73 450  $>$  73 054

16. 735 537  $<$  753 357

List from least to greatest.

17. 2338, 2383, 2838, 2333  
2333, 2338, 2383, 2838

18. 140 705, 14 750, 14 075, 14 705  
14 075, 14 705, 14 750, 140 705

List from greatest to least.

19. 4636, 4463, 4626, 4632  
4636, 4632, 4626, 4463

20. 769 649, 796 497, 790 904, 796 967  
796 967, 796 497, 790 904, 769 649

Round to the nearest ten.

21. 67 70

22. 3652 3650

23. 495 500

Round to the nearest hundred.

24. 815 800

25. 2748 2700

26. 49 350 49 400

Round to the nearest thousand.

27. 7600 8000

28. 14 450 14 000

29. 260 725 261 000



## Roman Numerals

Write the standard form.

1. IX 9

2. XVI 16

3. XXIV 24

Write the Roman numeral.

4. 50 L

5. 94 XCIV

6. 59 LIX

Write the standard form.

7. XLV 45

8. VIII 8

9. XIII 13

10. LIX 59

11. LXXI 71

12. XC 90

13. LXXXVI 86

14. XXXVIII 38

15. LII 52

16. XCIX 99

17. XLVII 47

18. LXIV 64

Write the Roman numeral.

19. 14 XIV

20. 29 XXIX

21. 49 XLIX

22. 56 LVI

23. 67 LXVII

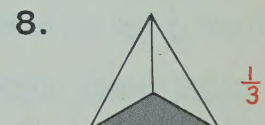
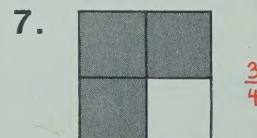
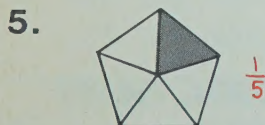
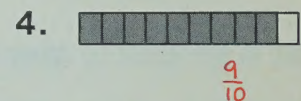
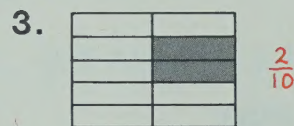
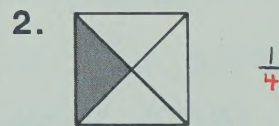
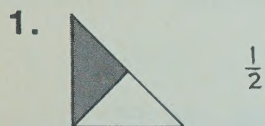
24. 78 LXXVIII

25. 85 LXXXV

26. 9 IX

## Fractions for Part of a Whole

Write a fraction to show how much is shaded.



For each fraction, draw a picture. Show equal parts. Then shade to show the fraction.

9.  $\frac{7}{10}$  7 of ten equal parts should be shaded.

10.  $\frac{3}{5}$  3 of 5 equal parts should be shaded.

11.  $\frac{2}{4}$  2 of 4 equal parts should be shaded.

12.  $\frac{4}{5}$  4 of 5 equal parts should be shaded. Pictures will vary.

13.  $\frac{1}{2}$  1 of 2 equal parts should be shaded.

14.  $\frac{2}{5}$  2 of 5 equal parts should be shaded.

15.  $\frac{2}{3}$  2 of 3 equal parts should be shaded.

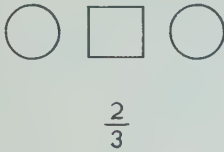
16.  $\frac{3}{10}$  3 of 10 equal parts should be shaded.



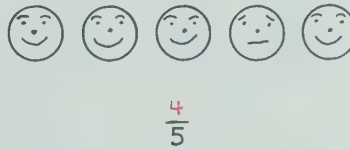
## Fractions for Part of a Set

Write a fraction to answer the question.

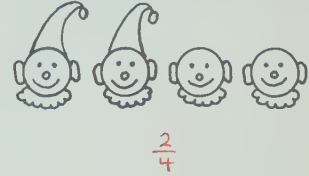
1. What fraction of the shapes are circles?



2. What fraction of the faces are smiling?



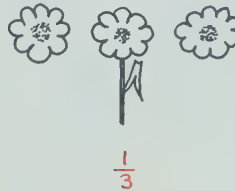
3. What fraction of the clowns have no hats?



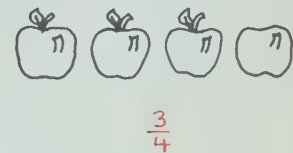
4. What fraction of the bulbs are lit?



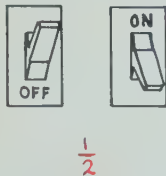
5. What fraction of the flowers have stems?



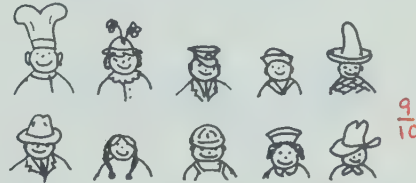
6. What fraction of the apples have leaves?



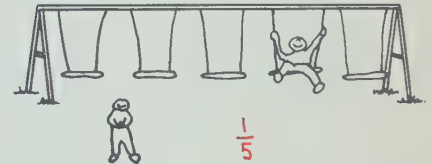
7. What fraction of the switches are "on"?



8. What fraction of the people have hats?



9. What fraction of the swings have children?



Draw a picture to show the fraction. *Pictures will vary.*

10. a group of faces,  
 $\frac{2}{3}$  of which are happy

11. a group of stems,  
 $\frac{3}{5}$  of which have flowers

12. a group of eggs,  
 $\frac{1}{4}$  of which are cracked

13. a group of sticks,  
 $\frac{7}{10}$  of which are straight

14. a group of people,  
 $\frac{1}{2}$  of whom wear glasses

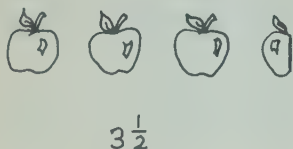
15. a group of shapes,  
 $\frac{3}{5}$  of which are squares



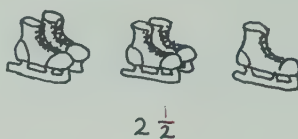
## Fractions Greater Than 1

Write a fraction to answer the question.

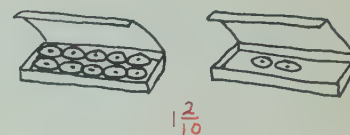
1. How many apples?



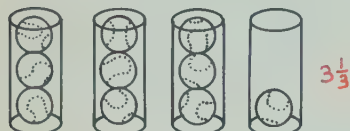
2. How many pairs of skates?



3. 10 cookies to a box.  
How many boxes of cookies?



4. 3 tennis balls to a can.  
How many cans of tennis balls?



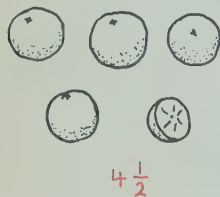
5. How many glasses of juice?



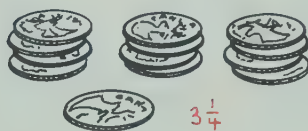
6. 5 pens to a box.  
How many boxes of pens?



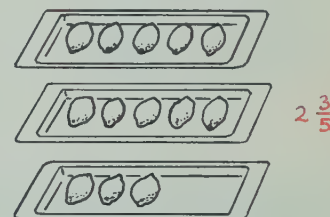
7. How many oranges?



8. 4 quarters to a stack.  
How many stacks of quarters?



9. 5 limes to a tray.  
How many trays of limes?



Draw a picture to show the amount. *Pictures will vary.*

10.  $1\frac{1}{2}$  pairs of sneakers

11.  $2\frac{1}{4}$  sandwiches

12. 10 markers to a box

$5\frac{3}{10}$  boxes

13.  $2\frac{2}{3}$  bananas

14.  $1\frac{4}{5}$  barrels  
of rainwater

15. 4 players to a team.  
 $3\frac{3}{4}$  teams



**Addition - Skills Warmup**

Add.

$$\begin{array}{r} 1. \ 2 \\ \ 3 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 2. \ 6 \\ \ 0 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 3. \ 1 \\ \ 5 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 4. \ 4 \\ \ 2 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 5. \ 3 \\ \ 4 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 6. \ 0 \\ \ 7 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 7. \ 9 \\ \ 2 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 8. \ 5 \\ \ 7 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 9. \ 8 \\ \ 6 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 10. \ 7 \\ \ 3 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 11. \ 7 \\ \ 9 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 12. \ 3 \\ \ 8 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 13. \ 4 \\ \ 7 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 14. \ 5 \\ \ 9 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 15. \ 8 \\ \ 8 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 16. \ 6 \\ \ 4 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 17. \ 9 \\ \ 3 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 18. \ 8 \\ \ 5 \\ \hline 13 \end{array}$$

$$19. \ 7 + 6 \text{ } 13$$

$$20. \ 8 + 2 \text{ } 10$$

$$21. \ 9 + 8 \text{ } 17$$

$$22. \ 6 + 5 \text{ } 11$$

$$23. \ 4 + 9 \text{ } 13$$

$$24. \ 8 + 7 \text{ } 15$$

$$25. \ 9 + 6 \text{ } 15$$

$$26. \ 4 + 8 \text{ } 12$$

**Subtraction - Skills Warmup**

Subtract.

$$\begin{array}{r} 1. \ 8 \\ \ 7 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 2. \ 6 \\ \ 2 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 3. \ 4 \\ \ 4 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 4. \ 3 \\ \ 1 \\ \hline 2 \end{array}$$

$$\begin{array}{r} 5. \ 9 \\ \ 3 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 6. \ 3 \\ \ 0 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 7. \ 13 \\ \ 9 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 8. \ 11 \\ \ 5 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 9. \ 15 \\ \ 7 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 10. \ 18 \\ \ 9 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 11. \ 12 \\ \ 3 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 12. \ 11 \\ \ 7 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 13. \ 10 \\ \ 9 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 14. \ 10 \\ \ 3 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 15. \ 12 \\ \ 8 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 16. \ 14 \\ \ 9 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 17. \ 17 \\ \ 8 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 18. \ 11 \\ \ 8 \\ \hline 3 \end{array}$$

$$19. \ 10 - 4 \text{ } 6$$

$$20. \ 13 - 6 \text{ } 7$$

$$21. \ 14 - 7 \text{ } 7$$

$$22. \ 16 - 9 \text{ } 7$$

$$23. \ 15 - 6 \text{ } 9$$

$$24. \ 13 - 5 \text{ } 8$$

$$25. \ 12 - 7 \text{ } 5$$

$$26. \ 14 - 6 \text{ } 8$$



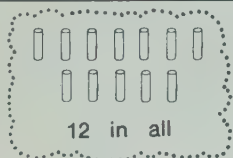
NAME \_\_\_\_\_

SPM4/U2/32-33

## Addition, Basic Facts

Add.

$$\begin{array}{r} 1. \quad 7 \\ \quad 5 \\ \hline 12 \end{array}$$



$$\begin{array}{r} 2. \quad 3 \\ \quad 8 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 3. \quad 8 \\ \quad 7 \\ \hline 15 \end{array}$$

$$4. \quad 2 + 5 = 7$$

$$5. \quad 7 + 9 = 16$$

$$\begin{array}{r} 6. \quad 5 \\ \quad 3 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 7. \quad 2 \\ \quad 7 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 8. \quad 6 \\ \quad 4 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 9. \quad 8 \\ \quad 9 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 10. \quad 6 \\ \quad 8 \\ \hline 14 \end{array}$$

$$\begin{array}{r} 11. \quad 7 \\ \quad 3 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 12. \quad 4 \\ \quad 9 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 13. \quad 8 \\ \quad 8 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 14. \quad 9 \\ \quad 6 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 15. \quad 7 \\ \quad 6 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 16. \quad 6 \\ \quad 5 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 17. \quad 4 \\ \quad 8 \\ \hline 12 \end{array}$$

$$18. \quad 3 + 6 = 9$$

$$19. \quad 4 + 4 = 8$$

$$20. \quad 8 + 5 = 13$$

$$21. \quad 2 + 9 = 11$$

$$22. \quad 7 + 7 = 14$$

$$23. \quad 8 + 2 = 10$$

$$24. \quad 0 + 9 = 9$$

$$25. \quad 9 + 5 = 14$$

SPM4/U2/34-35

## Addition, Regrouping Ones

Add.

$$\begin{array}{r} 1. \quad \overset{1}{4}5 \\ \quad 37 \\ \hline 82 \end{array}$$

$$\begin{array}{r} 2. \quad \overset{1}{2}4 \\ \quad 69 \\ \hline 93 \end{array}$$

$$\begin{array}{r} 3. \quad 18 \\ \quad 62 \\ \hline 80 \end{array}$$

$$4. \quad 26 + 36 = 62$$

$$\begin{array}{r} 5. \quad 58 \\ \quad 23 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 6. \quad 49 \\ \quad 35 \\ \hline 84 \end{array}$$

$$\begin{array}{r} 7. \quad 65 \\ \quad 28 \\ \hline 93 \end{array}$$

$$\begin{array}{r} 8. \quad 26 \\ \quad 45 \\ \hline 71 \end{array}$$

$$\begin{array}{r} 9. \quad 47 \\ \quad 26 \\ \hline 73 \end{array}$$

$$\begin{array}{r} 10. \quad 55 \\ \quad 36 \\ \hline 91 \end{array}$$

$$\begin{array}{r} 11. \quad 16 \\ \quad 49 \\ \hline 65 \end{array}$$

$$\begin{array}{r} 12. \quad 48 \\ \quad 47 \\ \hline 95 \end{array}$$

$$\begin{array}{r} 13. \quad 34 \\ \quad 18 \\ \hline 52 \end{array}$$

$$\begin{array}{r} 14. \quad 33 \\ \quad 19 \\ \hline 52 \end{array}$$

$$15. \quad 45 + 49 = 94$$

$$16. \quad 22 + 19 = 41$$

$$17. \quad 37 + 38 = 75$$

$$18. \quad 57 + 34 = 91$$



## Addition, Regrouping Ones, Tens, or Hundreds

Add.

1. $\begin{array}{r} \overset{1}{2}71 \\ 356 \\ \hline 627 \end{array}$	2. $\begin{array}{r} \overset{1}{1}65 \\ 329 \\ \hline 494 \end{array}$	3. $\begin{array}{r} 325 \\ 84 \\ \hline 409 \end{array}$	4. $\begin{array}{r} 2854 \\ 138 \\ \hline 2992 \end{array}$	5. $\begin{array}{r} 4824 \\ 1964 \\ \hline 6788 \end{array}$
---	---	---	--	---

6.  $\begin{array}{r} 363 \\ 254 \\ \hline 617 \end{array}$

7.  $\begin{array}{r} 457 \\ 72 \\ \hline 529 \end{array}$

8.  $\begin{array}{r} 1537 \\ 59 \\ \hline 1596 \end{array}$

9.  $\begin{array}{r} 436 \\ 236 \\ \hline 672 \end{array}$

10.  $\begin{array}{r} 2612 \\ 2871 \\ \hline 5483 \end{array}$

11.  $\begin{array}{r} 181 \\ 175 \\ \hline 356 \end{array}$

12.  $\begin{array}{r} 6941 \\ 1234 \\ \hline 8175 \end{array}$

13.  $\begin{array}{r} 377 \\ 181 \\ \hline 558 \end{array}$

14.  $\begin{array}{r} 228 \\ 455 \\ \hline 683 \end{array}$

15.  $\begin{array}{r} 416 \\ 243 \\ \hline 659 \end{array}$

16.  $\begin{array}{r} 5320 \\ 1879 \\ \hline 7199 \end{array}$

17.  $\begin{array}{r} 6053 \\ 2082 \\ \hline 8135 \end{array}$

18.  $\begin{array}{r} 129 \\ 146 \\ \hline 275 \end{array}$

19.  $\begin{array}{r} 5024 \\ 2759 \\ \hline 7783 \end{array}$

20.  $\begin{array}{r} 1490 \\ 2193 \\ \hline 3683 \end{array}$

## Addition, Two or More Regroupings

Add.

1. $\begin{array}{r} \overset{1}{4}398 \\ 2567 \\ \hline 6965 \end{array}$	2. $\begin{array}{r} \overset{1}{3}528 \\ 4739 \\ \hline 8267 \end{array}$	3. $\begin{array}{r} 8437 \\ 1167 \\ \hline 9604 \end{array}$	4. $1629 + 2578 = 4207$
--	--	---	-------------------------

5.  $\begin{array}{r} 1525 \\ 4482 \\ \hline 6007 \end{array}$

6.  $\begin{array}{r} 3289 \\ 3669 \\ \hline 6958 \end{array}$

7.  $\begin{array}{r} 2637 \\ 5628 \\ \hline 8265 \end{array}$

8.  $\begin{array}{r} 1574 \\ 1564 \\ \hline 3138 \end{array}$

9.  $\begin{array}{r} 2149 \\ 1785 \\ \hline 3934 \end{array}$

10.  $\begin{array}{r} 3648 \\ 1475 \\ \hline 5123 \end{array}$

11.  $\begin{array}{r} 2468 \\ 2098 \\ \hline 4566 \end{array}$

12.  $\begin{array}{r} 5645 \\ 1839 \\ \hline 7484 \end{array}$

13.  $\begin{array}{r} 6784 \\ 2549 \\ \hline 9333 \end{array}$

14.  $\begin{array}{r} 218 \\ 493 \\ \hline 711 \end{array}$

15.  $187 + 5629 = 5816$

16.  $5576 + 2647 = 8223$

17.  $3932 + 1489 = 5421$



**Practice**

Add.

$$\begin{array}{r} 1. \ 7 \\ \ 9 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 2. \ 56 \\ \ 31 \\ \hline 87 \end{array}$$

$$\begin{array}{r} 3. \ 438 \\ \ 120 \\ \hline 558 \end{array}$$

$$\begin{array}{r} 4. \ 23 \\ \ 74 \\ \hline 97 \end{array}$$

$$\begin{array}{r} 5. \ 23 \\ \ 59 \\ \hline 82 \end{array}$$

$$\begin{array}{r} 6. \ 164 \\ \ 72 \\ \hline 236 \end{array}$$

$$\begin{array}{r} 7. \ 636 \\ \ 2612 \\ \hline 3248 \end{array}$$

$$\begin{array}{r} 8. \ 1459 \\ \ 1713 \\ \hline 3172 \end{array}$$

$$\begin{array}{r} 9. \ 456 \\ \ 761 \\ \hline 1217 \end{array}$$

$$\begin{array}{r} 10. \ 0 \\ \ 7 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 11. \ 754 + 878 \\ 1632 \end{array}$$

$$\begin{array}{r} 12. \ 803 + 519 \\ 1322 \end{array}$$

$$\begin{array}{r} 13. \ 1486 + 819 \\ 2305 \end{array}$$

$$\begin{array}{r} 14. \ 8416 + 792 \\ 9208 \end{array}$$

$$\begin{array}{r} 15. \ 697 + 3178 \\ 3875 \end{array}$$

$$\begin{array}{r} 16. \ 2705 + 486 \\ 3191 \end{array}$$

Solve. Show your work.

17. In an experiment, one beetle trap caught 78 beetles. Another caught 93. How many beetles did the two traps catch? **171**

18. The car show had 9 new models and 8 antiques. How many cars were in the show? **17**

19. Calgary sent 103 persons to the convention. Edmonton sent 98. Together, how many did the two cities send? **201**

20. 367 of the train passengers were going to Halifax. 195 were going to Dartmouth. How many were going to the two cities in all? **562**

21. The farm produced 2875 muskmelons and 4195 honeydew melons. How many melons did it produce in all? **7070**

22. The farmer sold the wheat crop for \$3550 and the oat crop for \$5875. For how much did the farmer sell the two crops in all? **\$9425**



## Adding Three Numbers

Add.

1. $\begin{array}{r} 211 \\ 812 \\ 3564 \\ 2934 \\ \hline 7310 \end{array}$	2. $\begin{array}{r} 111 \\ 618 \\ 5074 \\ 973 \\ \hline 6665 \end{array}$	3. $\begin{array}{r} 4238 \\ 1934 \\ 829 \\ \hline 7001 \end{array}$	4. $379 + 4649 + 321$ $5349$
---	--	--	---------------------------------

$$\begin{array}{r} 5. \quad 758 \\ 6433 \\ 524 \\ \hline 7715 \end{array}$$

$$\begin{array}{r} 6. \quad 5276 \\ 204 \\ 2985 \\ \hline 8465 \end{array}$$

$$\begin{array}{r} 7. \quad 4321 \\ 226 \\ 1357 \\ \hline 5904 \end{array}$$

$$\begin{array}{r} 8. \quad 3819 \\ 1257 \\ 4515 \\ \hline 9591 \end{array}$$

$$\begin{array}{r} 9. \quad 7682 \\ 1205 \\ 627 \\ \hline 9514 \end{array}$$

$$\begin{array}{r} 10. \quad 352 \\ 2258 \\ 2481 \\ \hline 5091 \end{array}$$

$$\begin{array}{r} 11. \quad 961 \\ 4282 \\ 2118 \\ \hline 7361 \end{array}$$

$$\begin{array}{r} 12. \quad 3249 \\ 1143 \\ 2668 \\ \hline 7060 \end{array}$$

$$\begin{array}{r} 13. \quad 698 \\ 715 \\ 2947 \\ \hline 4360 \end{array}$$

$$\begin{array}{r} 14. \quad 4645 \\ 321 \\ 736 \\ \hline 5702 \end{array}$$

$$15. \quad 357 + 6086 + 34$$
  
 $6477$

$$16. \quad 348 + 2858 + 4571$$
  
 $7777$

## Practice

Solve. Show your work.

- The farmer baled hay in three fields. One field gave 755 bales of hay. Another gave 862 bales. The third gave 516 bales. How many bales were there in all?  $2133$
- The counter on one turnstile showed 485. On the other turnstile, the counter showed 752. How many is this in all?  $1237$
- The car-carrier carried one car of 980 kg, another of 1084 kg, and a third of 1116 kg. How heavy were the three cars in all?  $3180 \text{ kg}$
- In one day, the livestock broker bought 2000 cattle, 3500 hogs, and 700 sheep. How many head of livestock did the broker buy that day?  $6200$

## Estimating the Sum

First round and add to estimate the sum. Then find the exact sum.

<p>1. <math>\begin{array}{r} \overset{1}{8} \overset{1}{2} \overset{1}{5} 6 \\ 572 \\ \hline 538 \\ \hline 9366 \end{array} \rightarrow \begin{array}{r} 8300 \\ 600 \\ 500 \\ \hline 9400 \end{array}</math></p> <p>Estimate first.</p> <p>Then add.</p>	<p>2. <math>\begin{array}{r} \overset{1}{1} \overset{1}{5} \overset{2}{6} 8 \\ 2895 \\ \hline 1427 \\ \hline 5890 \end{array} \rightarrow \begin{array}{r} 2000 \\ 3000 \\ 1000 \\ \hline 6000 \end{array}</math></p> <p>Estimate first.</p> <p>Then add.</p>	<p>3. <math>6789 + 362 + 801</math></p> <p>7952</p>
---	---	---

4.  $\begin{array}{r} 4378 \\ 645 \\ \hline 706 \\ \hline 5729 \end{array}$

5.  $\begin{array}{r} 3859 \\ 734 \\ \hline 89 \\ \hline 4682 \end{array}$

6.  $\begin{array}{r} \$2334 \\ 4258 \\ \hline 1769 \\ \hline \$8361 \end{array}$

7.  $\begin{array}{r} 493 \\ 858 \\ \hline 2105 \\ \hline 3456 \end{array}$

8.  $\begin{array}{r} 3044 \\ 277 \\ \hline 4086 \\ \hline 7407 \end{array}$

9.  $\begin{array}{r} \$813 \\ 732 \\ \hline 660 \\ \hline \$2205 \end{array}$

10.  $\begin{array}{r} 1600 \\ 398 \\ \hline 574 \\ \hline 2572 \end{array}$

11.  $\begin{array}{r} 7156 \\ 550 \\ \hline 1232 \\ \hline 8938 \end{array}$

12.  $\begin{array}{r} \$2330 \\ 1895 \\ \hline 2916 \\ \hline \$7141 \end{array}$

13.  $2789 + 752 + 903$

4444

14.  $824 + 778 + 624$

2226

15.  $2321 + 512 + 167$

3000

16.  $178 + 256 + 538$

972

17.  $109 + 378 + 325$

812

18.  $4025 + 1616 + 1396$

7037



**Practice**

Add.

$$\begin{array}{r} 1. \ 45 \\ \ 34 \\ \hline 79 \end{array}$$

$$\begin{array}{r} 2. \ 36 \\ \ 52 \\ \hline 88 \end{array}$$

$$\begin{array}{r} 3. \ 314 \\ \ 73 \\ \hline 387 \end{array}$$

$$\begin{array}{r} 4. \ 182 \\ \ 615 \\ \hline 797 \end{array}$$

$$\begin{array}{r} 5. \ 2427 \\ \ 1521 \\ \hline 3948 \end{array}$$

$$\begin{array}{r} 6. \ 34 \\ \ 27 \\ \hline 61 \end{array}$$

$$\begin{array}{r} 7. \ 18 \\ \ 24 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 8. \ 532 \\ \ 328 \\ \hline 860 \end{array}$$

$$\begin{array}{r} 9. \ 139 \\ \ 44 \\ \hline 183 \end{array}$$

$$\begin{array}{r} 10. \ 605 \\ \ 179 \\ \hline 784 \end{array}$$

$$\begin{array}{r} 11. \ 484 \\ \ 62 \\ \hline 546 \end{array}$$

$$\begin{array}{r} 12. \ 463 \\ \ 463 \\ \hline 926 \end{array}$$

$$\begin{array}{r} 13. \ 2907 \\ \ 1342 \\ \hline 4249 \end{array}$$

$$\begin{array}{r} 14. \ 3231 \\ \ 1688 \\ \hline 4919 \end{array}$$

$$\begin{array}{r} 15. \ 1826 \\ \ 5333 \\ \hline 7159 \end{array}$$

$$\begin{array}{r} 16. \ 569 \\ \ 257 \\ \hline 826 \end{array}$$

$$\begin{array}{r} 17. \ 195 \\ \ 426 \\ \hline 621 \end{array}$$

$$\begin{array}{r} 18. \ 173 \\ \ 389 \\ \hline 562 \end{array}$$

$$\begin{array}{r} 19. \ 2144 \\ \ 916 \\ \hline 3060 \end{array}$$

$$\begin{array}{r} 20. \ 3280 \\ \ 3728 \\ \hline 7008 \end{array}$$

$$\begin{array}{r} 21. \ 6066 \\ \ 594 \\ \hline 6660 \end{array}$$

$$\begin{array}{r} 22. \ 2479 \\ \ 2851 \\ \hline 5330 \end{array}$$

$$\begin{array}{r} 23. \ 5739 \\ \ 2468 \\ \hline 8207 \end{array}$$

$$\begin{array}{r} 24. \ 5927 \\ \ 1593 \\ \hline 7520 \end{array}$$

$$\begin{array}{r} 25. \ 4836 \\ \ 2878 \\ \hline 7714 \end{array}$$

$$\begin{array}{r} 26. \ 34 \\ \ 69 \\ \ 22 \\ \hline 125 \end{array}$$

$$\begin{array}{r} 27. \ 357 \\ \ 28 \\ \ 180 \\ \hline 565 \end{array}$$

$$\begin{array}{r} 28. \ 457 \\ \ 246 \\ \ 68 \\ \hline 771 \end{array}$$

$$\begin{array}{r} 29. \ 4185 \\ \ 389 \\ \ 465 \\ \hline 5039 \end{array}$$

$$\begin{array}{r} 30. \ 1587 \\ \ 3909 \\ \ 2568 \\ \hline 8064 \end{array}$$

Solve. Show your work.

31. Mr. Griggs paid \$3585 for a used car and \$5578 for a used truck. How much did he pay in all?  $\$9163$

32. In the video game, Shirley had scores of 2850, 3980, and 3730. What was her total score?  $10560$

33. The newstand sold 148 copies of the Sun and 195 copies of the Star. How many papers did it sell in all?  $343$

34. The mail room processed 576 envelopes and 67 packages one day. How many items did it process in all?  $643$

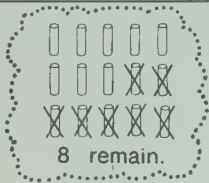
NAME \_\_\_\_\_

SPM4/U3/52-53

## Subtraction, Basic Facts

Subtract.

$$\begin{array}{r} 1. \ 15 \\ - 7 \\ \hline 8 \end{array}$$



$$\begin{array}{r} 2. \ 11 \\ - 5 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 3. \ 12 \\ - 8 \\ \hline 4 \end{array}$$

$$4. \ 12 - 5 \ 7$$

$$5. \ 10 - 7 \ 3$$



$$\begin{array}{r} 6. \ 8 \\ - 3 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 7. \ 10 \\ - 1 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 8. \ 13 \\ - 6 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 9. \ 17 \\ - 8 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 10. \ 16 \\ - 9 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 11. \ 18 \\ - 9 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 12. \ 8 \\ - 6 \\ \hline 2 \end{array}$$

$$\begin{array}{r} 13. \ 12 \\ - 3 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 14. \ 12 \\ - 6 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 15. \ 13 \\ - 9 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 16. \ 14 \\ - 5 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 17. \ 14 \\ - 8 \\ \hline 6 \end{array}$$

$$18. \ 9 - 6 \ 3$$

$$19. \ 11 - 7 \ 4$$

$$20. \ 16 - 8 \ 8$$

$$21. \ 10 - 4 \ 6$$

$$22. \ 13 - 8 \ 5$$

$$23. \ 10 - 5 \ 5$$

$$24. \ 11 - 8 \ 3$$

$$25. \ 15 - 9 \ 6$$

SPM4/U3/54-55

## Subtraction, Regrouping Tens

Subtract.

$$\begin{array}{r} 1. \ 7 \overset{16}{\cancel{80}} \\ - 27 \\ \hline 59 \end{array}$$

$$\begin{array}{r} 2. \ 6 \overset{18}{\cancel{78}} \\ - 49 \\ \hline 29 \end{array}$$

$$\begin{array}{r} 3. \ 57 \\ - 38 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 4. \ 60 \\ - 29 \\ \hline 31 \end{array}$$

$$5. \ 84 - 17 \ 67$$

$$\begin{array}{r} 6. \ 80 \\ - 38 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 7. \ 82 \\ - 57 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 8. \ 71 \\ - 25 \\ \hline 46 \end{array}$$

$$\begin{array}{r} 9. \ 52 \\ - 14 \\ \hline 38 \end{array}$$

$$\begin{array}{r} 10. \ 60 \\ - 33 \\ \hline 27 \end{array}$$

$$\begin{array}{r} 11. \ 81 \\ - 49 \\ \hline 32 \end{array}$$

$$\begin{array}{r} 12. \ 58 \\ - 42 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 13. \ 73 \\ - 34 \\ \hline 39 \end{array}$$

$$\begin{array}{r} 14. \ 55 \\ - 27 \\ \hline 28 \end{array}$$

$$\begin{array}{r} 15. \ 93 \\ - 45 \\ \hline 48 \end{array}$$

$$16. \ 42 - 29 \ 13$$

$$17. \ 91 - 34 \ 57$$

$$18. \ 81 - 68 \ 13$$



## Subtraction, Regrouping Tens, Hundreds, or Thousands

Subtract.

1. $\begin{array}{r} \overset{6}{\cancel{7}}\overset{13}{5}8 \\ 3616 \\ \hline 3742 \end{array}$	2. $\begin{array}{r} \overset{4}{\cancel{4}}\overset{13}{3}7 \\ 2046 \\ \hline 2491 \end{array}$	3. $\begin{array}{r} 6449 \\ 2731 \\ \hline 3718 \end{array}$	4. $\begin{array}{r} 865 \\ 372 \\ \hline 493 \end{array}$	5. $\begin{array}{r} 7066 \\ 5242 \\ \hline 1824 \end{array}$
--	--	---	--	---

6. $\begin{array}{r} 350 \\ 135 \\ \hline 215 \end{array}$	7. $\begin{array}{r} 3618 \\ 241 \\ \hline 3377 \end{array}$	8. $\begin{array}{r} 8273 \\ 7312 \\ \hline 961 \end{array}$	9. $\begin{array}{r} 7094 \\ 6721 \\ \hline 373 \end{array}$	10. $\begin{array}{r} 349 \\ 153 \\ \hline 196 \end{array}$
11. $\begin{array}{r} 7855 \\ 583 \\ \hline 7272 \end{array}$	12. $\begin{array}{r} 991 \\ 736 \\ \hline 255 \end{array}$	13. $\begin{array}{r} 6228 \\ 4907 \\ \hline 1321 \end{array}$	14. $\begin{array}{r} 5939 \\ 5489 \\ \hline 450 \end{array}$	15. $\begin{array}{r} 5041 \\ 2440 \\ \hline 2601 \end{array}$

## Subtraction, Two or More Regroupings

Subtract.

1. $\begin{array}{r} \overset{11}{\cancel{3}}\overset{12}{\cancel{2}}\overset{16}{\cancel{3}}\overset{16}{\cancel{6}} \\ 468 \\ \hline 2768 \end{array}$	2. $\begin{array}{r} \overset{5}{\cancel{6}}\overset{16}{\cancel{7}}\overset{18}{\cancel{8}}3 \\ 4892 \\ \hline 1891 \end{array}$	3. $\begin{array}{r} 6474 \\ 3546 \\ \hline 2928 \end{array}$	4. $\begin{array}{r} 8246 \\ 6169 \\ \hline 2077 \end{array}$	5. $\begin{array}{r} 6180 \\ 1284 \\ \hline 4896 \end{array}$
--	---	---	---	---

6. $\begin{array}{r} 1060 \\ 729 \\ \hline 331 \end{array}$	7. $\begin{array}{r} 9616 \\ 3852 \\ \hline 5764 \end{array}$	8. $\begin{array}{r} 8382 \\ 5934 \\ \hline 2448 \end{array}$	9. $\begin{array}{r} 877 \\ 298 \\ \hline 579 \end{array}$	10. $\begin{array}{r} \$1420 \\ 175 \\ \hline \$1245 \end{array}$
11. $\begin{array}{r} 9221 \\ 689 \\ \hline 8532 \end{array}$	12. $\begin{array}{r} 5347 \\ 574 \\ \hline 4773 \end{array}$	13. $\begin{array}{r} 5374 \\ 3538 \\ \hline 1836 \end{array}$	14. $\begin{array}{r} 5642 \\ 1773 \\ \hline 3869 \end{array}$	15. $\begin{array}{r} \$9408 \\ 1432 \\ \hline \$7976 \end{array}$
16. $\begin{array}{r} 8495 \\ 1956 \\ \hline 6539 \end{array}$	17. $\begin{array}{r} 647 \\ 589 \\ \hline 58 \end{array}$	18. $\begin{array}{r} 7263 \\ 373 \\ \hline 6890 \end{array}$	19. $\begin{array}{r} 7104 \\ 1162 \\ \hline 5942 \end{array}$	20. $\begin{array}{r} \$722 \\ 527 \\ \hline \$195 \end{array}$

**Practice**

Perform the indicated operation .

$$\begin{array}{r} 1. \quad 63 \\ - 21 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 2. \quad 69 \\ + 48 \\ \hline 117 \end{array}$$

$$\begin{array}{r} 3. \quad 613 \\ - 175 \\ \hline 438 \end{array}$$

$$\begin{array}{r} 4. \quad \$657 \\ + 179 \\ \hline \$836 \end{array}$$

$$\begin{array}{r} 5. \quad 3406 \\ - 1278 \\ \hline 2128 \end{array}$$

$$\begin{array}{r} 6. \quad 74 \\ 291 \\ + 336 \\ \hline 701 \end{array}$$

$$\begin{array}{r} 7. \quad 493 \\ - 228 \\ \hline 265 \end{array}$$

$$\begin{array}{r} 8. \quad 4112 \\ - 1739 \\ \hline 2373 \end{array}$$

$$\begin{array}{r} 9. \quad 305 \\ 621 \\ + 717 \\ \hline 1643 \end{array}$$

$$\begin{array}{r} 10. \quad \$148 \\ - 79 \\ \hline \$69 \end{array}$$

$$11. \quad 2072 - 1865 \\ 207$$

$$12. \quad 421 + 79 + 164 \\ 664$$

$$13. \quad \$227 - \$15 \\ \$212$$

$$14. \quad 300 - 163 \\ 137$$

$$15. \quad \$421 + \$43 + \$809 \\ \$1273$$

$$16. \quad 7324 - 3865 \\ 3459$$

Solve. Show your work.

17. The base price for the new car is \$7350. Total cost for the extra features is \$2275. What is the price of the new car with the extra features? \$9625

18. Laurence filled the tank with 1350 L of water. During the night 285 L leaked out. How much was left? 1065 L

19. The clinic treated 715 patients in November. Last November, it treated 478 patients. How many more patients were treated this November? 237

20. Marie-Louise saved \$135 last year and \$85 so far this year. She hopes to save \$90 more this year. If she does, how much will she have saved altogether? \$310

21. The fishing boat brought in 1750 kg of fish. By nightfall 688 kg had been sold. How much remained? 1062 kg

22. The new census shows that the town has grown by a total of 568 people. It used to have 4777 people. Now how many does it have? 5345



## Subtraction, Regrouping with Zeros

Subtract.

$\begin{array}{r} \overset{2\ 9\ 9\ 10}{1. \quad 3000} \\ - 2863 \\ \hline 137 \end{array}$	$\begin{array}{r} \overset{4\ 9\ 10}{2. \quad 9500} \\ - 3298 \\ \hline 6202 \end{array}$	$\begin{array}{r} 3. \quad 4000 \\ - 1374 \\ \hline 2626 \end{array}$	$\begin{array}{r} 4. \quad 6030 \\ - 3165 \\ \hline 2865 \end{array}$	$\begin{array}{r} 5. \quad \$7200 \\ - 426 \\ \hline \$6774 \end{array}$
$\begin{array}{r} 6. \quad 6020 \\ - 2199 \\ \hline 3821 \end{array}$	$\begin{array}{r} 7. \quad 1020 \\ - 586 \\ \hline 434 \end{array}$	$\begin{array}{r} 8. \quad 7000 \\ - 1032 \\ \hline 5968 \end{array}$	$\begin{array}{r} 9. \quad 8101 \\ - 3717 \\ \hline 4384 \end{array}$	$\begin{array}{r} 10. \quad \$904 \\ - 349 \\ \hline \$555 \end{array}$
$\begin{array}{r} 11. \quad 8070 \\ - 5524 \\ \hline 2546 \end{array}$	$\begin{array}{r} 12. \quad 8005 \\ - 4987 \\ \hline 3018 \end{array}$	$\begin{array}{r} 13. \quad 502 \\ - 374 \\ \hline 128 \end{array}$	$\begin{array}{r} 14. \quad 9030 \\ - 5273 \\ \hline 3757 \end{array}$	$\begin{array}{r} 15. \quad \$3050 \\ - 885 \\ \hline \$2165 \end{array}$
$\begin{array}{r} 16. \quad \$602 \\ - 405 \\ \hline \$197 \end{array}$	$\begin{array}{r} 17. \quad 9201 \\ - 2365 \\ \hline 6836 \end{array}$	$\begin{array}{r} 18. \quad 8000 \\ - 410 \\ \hline 7590 \end{array}$	$\begin{array}{r} 19. \quad \$8013 \\ - 2987 \\ \hline \$5026 \end{array}$	$\begin{array}{r} 20. \quad \$6008 \\ - 516 \\ \hline \$5492 \end{array}$

## Practice

Solve. Show your work.

- Indira is sorting the slides she has taken on her travels. She has a total of 1200 slides. 480 of these are from India. How many others does she have? **720**
- The Shoe Store receives a shipment of shoes. 160 pairs are for girls. 132 pairs are for boys. 88 pairs are for adults. How many pairs did The Shoe Store receive? **380**
- The clinic checked 308 children for eye problems. 283 passed the test. How many showed eye problems? **25**
- Mrs. Taylor bought a television set for \$273, a table for \$89, and a lamp for \$56. Altogether, how much did she spend? **\$418**
- The bulb was supposed to burn for at least 2000 h. It burned out after 775 h of use. How many hours fewer than 2000 is this? **1225**
- Tuition for school is \$3000. Jed has already paid \$275. How much does he still owe? **\$2725**

## Using Addition to Check Subtraction

Subtract. Add to check.

$\begin{array}{r} 12 \\ 8 \cancel{14} \\ 1. \quad \cancel{934} \\ \underline{578} \\ 356 \end{array}$	$\begin{array}{r} 11 \\ 356 \\ \underline{578} \\ 934 \checkmark \end{array}$	$\begin{array}{r} 310 \\ 2. \quad \cancel{405} \\ \underline{261} \\ 144 \end{array}$	$\begin{array}{r} 144 \\ \underline{261} \\ 405 \checkmark \end{array}$	$\begin{array}{r} 3. \quad \$661 \\ \underline{475} \\ \$186 \end{array}$	$\begin{array}{r} 4. \quad 82 \\ \underline{25} \\ 57 \end{array}$
---	---	---	---	---	--

$\begin{array}{r} 5. \quad 923 \\ \underline{289} \\ 634 \end{array}$	$\begin{array}{r} 6. \quad 77 \\ \underline{31} \\ 46 \end{array}$	$\begin{array}{r} 7. \quad 1036 \\ \underline{581} \\ 455 \end{array}$	$\begin{array}{r} 8. \quad \$7393 \\ \underline{4514} \\ \$2879 \end{array}$
$\begin{array}{r} 9. \quad 601 \\ \underline{269} \\ 332 \end{array}$	$\begin{array}{r} 10. \quad 9000 \\ \underline{6979} \\ 2021 \end{array}$	$\begin{array}{r} 11. \quad 867 \\ \underline{354} \\ 513 \end{array}$	$\begin{array}{r} 12. \quad \$8685 \\ \underline{7243} \\ \$1442 \end{array}$
$\begin{array}{r} 13. \quad 921 \\ \underline{23} \\ 898 \end{array}$	$\begin{array}{r} 14. \quad 101 \\ \underline{34} \\ 67 \end{array}$	$\begin{array}{r} 15. \quad \$5000 \\ \underline{2825} \\ \$2175 \end{array}$	$\begin{array}{r} 16. \quad 747 \\ \underline{368} \\ 379 \end{array}$

SPM4/U3/71

## Addition and Subtraction Together

Perform the indicated operations. Work inside the parentheses first.  
Show your work on other paper.

$1. \quad (732 - 345) + 232 \quad 619$ $\begin{array}{r} 12 \\ 6 \cancel{12} \\ \cancel{732} \\ - \underline{345} \\ 387 \end{array}$ $\begin{array}{r} 1 \\ 387 \\ + \underline{232} \\ 619 \end{array}$	$2. \quad 732 - (345 + 232) \quad 155$ $\begin{array}{r} 345 \\ + \underline{232} \end{array}$
$3. \quad (5845 - 4963) - 351 \quad 531$	$4. \quad 5845 - (4963 + 351) \quad 531$

- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| 5. $(723 - 622) + 42 \quad 143$     | 6. $723 - (622 + 42) \quad 59$        |
| 7. $723 - (622 - 42) \quad 143$     | 8. $6946 - (4925 - 1147) \quad 3168$  |
| 9. $(6946 - 4925) - 1147 \quad 874$ | 10. $(6946 - 4925) + 1147 \quad 3168$ |



## Practice

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 421 \\ + 187 \\ \hline 608 \end{array}$$

$$\begin{array}{r} 2. \quad 703 \\ - 219 \\ \hline 484 \end{array}$$

$$\begin{array}{r} 3. \quad \$421 \\ \quad 657 \\ + 273 \\ \hline \$1351 \end{array}$$

$$\begin{array}{r} 4. \quad 650 \\ \quad 729 \\ + 333 \\ \hline 1712 \end{array}$$

$$\begin{array}{r} 5. \quad 1700 \\ - 848 \\ \hline 852 \end{array}$$

$$\begin{array}{r} 6. \quad 74 \\ + 86 \\ \hline 160 \end{array}$$

$$\begin{array}{r} 7. \quad 2001 \\ - 485 \\ \hline 1516 \end{array}$$

$$\begin{array}{r} 8. \quad 8807 \\ + 994 \\ \hline 9801 \end{array}$$

$$\begin{array}{r} 9. \quad 304 \\ - 37 \\ \hline 267 \end{array}$$

$$\begin{array}{r} 10. \quad 101 \\ - 16 \\ \hline 85 \end{array}$$

$$11. (27 - 13) + 51$$

65

$$12. 160 - (90 + 60)$$

10

$$13. 1495 + (2700 - 1895)$$

2300

$$14. \$451 + \$360 + \$83$$

\$894

$$15. 471 - (286 - 147)$$

332

$$16. 488 + 376 + 542$$

1406

Solve. Show your work.

17. Department A is allowed \$8000 for expenses. So far, it has spent \$3705. How much more can Department A spend? \$4295

18. The large tank holds 2210 L of corn oil. The small tank holds 1745 L. In all, how much corn oil do the two tanks hold? 3955 L

19. Tahir collects precious gems. He has 178 rubies, 275 emeralds, and 315 opals. Altogether, how many gems does he have? 768

20. The town issued 304 dog licences this year. Last year, it issued 287. How many more did it issue this year? 17

21. 2146 sheep on the ranch were rounded up for shearing. So far, only 750 have been shorn. How many are left to shear? 1396


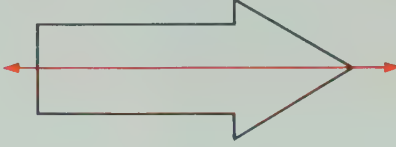
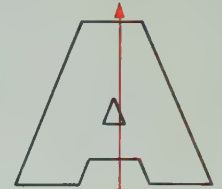
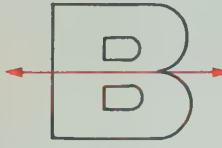
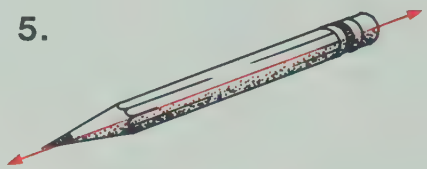
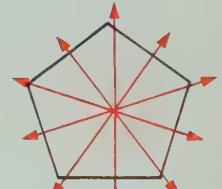
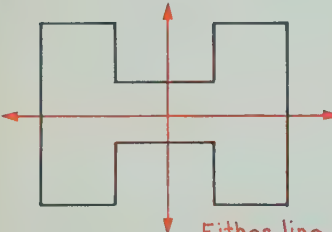


22. The votes are in. There are 480 for Mr. Smith, 476 for Mr. Chen, and 509 for Mrs. Hindo. What is the total number of votes that were cast? 1465

NAME \_\_\_\_\_

SPM4/U4/74-75

## Line Symmetry

Draw a line of symmetry.

1.  The two sides are alike.	2. 	3. 
4. 	5. 	6. 
7. 	8. 	9. 

SPM4/U4/76-77

## Lines and Line Segments

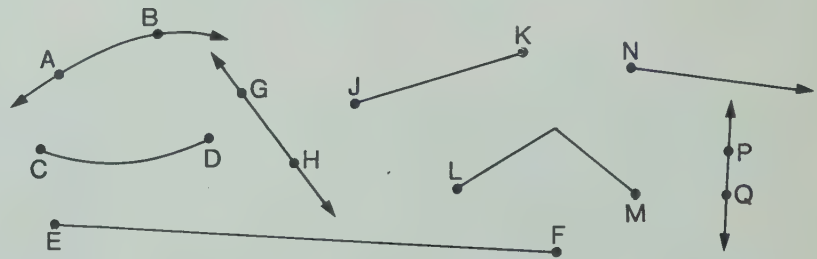
Name \_\_\_\_\_

1. all the lines shown.

$\overleftrightarrow{GH}$ ,  $\overleftrightarrow{PQ}$

2. all the line segments shown.

$\overline{EF}$ ,  $\overline{JK}$



Name \_\_\_\_\_

3. all the lines shown.

$\overleftrightarrow{RS}$ ,  $\overleftrightarrow{ST}$

4. all the line segments shown.

$\overline{WY}$ ,  $\overline{YZ}$ ,  $\overline{ZX}$

Draw and label Pictures will vary.

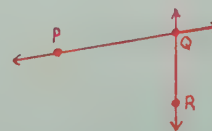
5.  $\overleftrightarrow{CN}$



6.  $\overline{AD}$



7. points P, Q, R, and  $\overleftrightarrow{PQ}$  and  $\overleftrightarrow{QR}$ .



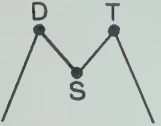


Print

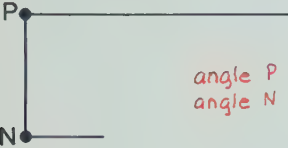

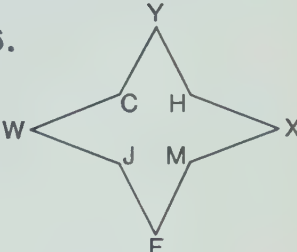
8. your first name  
using only line segments. Answers will vary.



## Angles

Name the angles suggested by each picture.

1.  angle D angle S angle T	2.  angle R angle Z angle A	3.  angle O
--	--	--

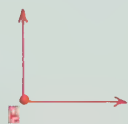
4.  angle P angle N	5.  angle G	6.  angle W angle J angle F angle M angle X angle H angle Y angle Z
---	--	---

Draw and label these.

7. angle C smaller than a right angle



8. right angle B



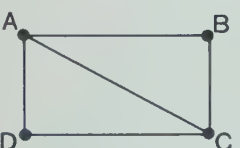

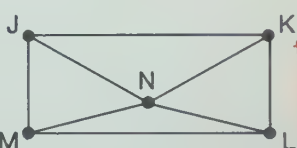
9. angle A larger than a right angle

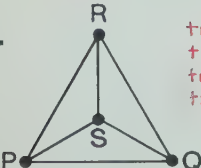
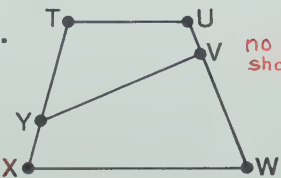
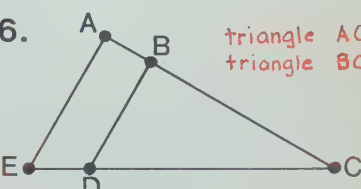


SPM4/U4/80-81

## Triangles

Name each triangle shown.

1.  triangle ABC, triangle ADC	2.  triangle EFG triangle EHG triangle EFH	3.  triangles JNK KNL LNM MNJ
--	---	---

4.  triangle PSR triangle RSQ triangle QSP triangle PQR	5.  no triangles shown	6.  triangle ACE triangle BCD
---	---	---

For the triangle shown,

7. name the angles.



Draw and label Pictures will vary.

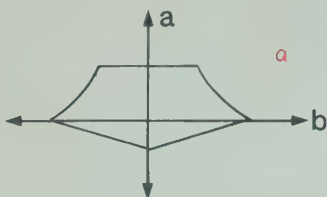
8. a triangle with sides LM and MN.



## Practice

Which line is a line of symmetry?

1.



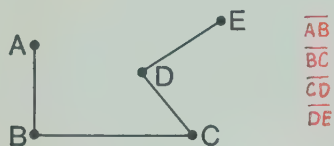
Draw a line of symmetry.

2.



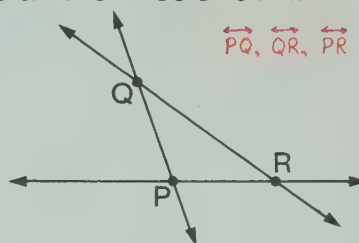
Name all the line segments shown.

3.



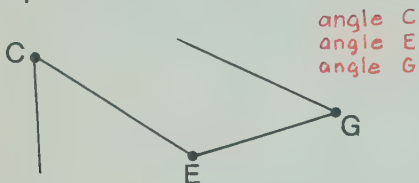
Name all the lines shown.

4.



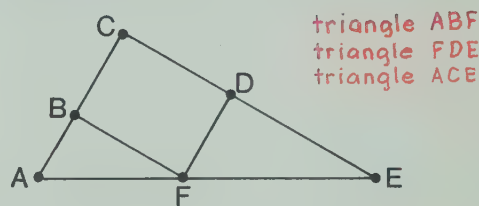
Name the angles suggested by this picture.

5.

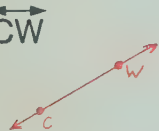


Name each triangle shown.

6.



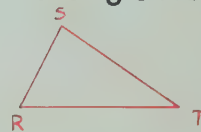
Draw and label these. Pictures will vary.

7.  $\overleftrightarrow{CW}$ 

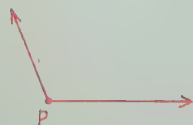
8. right angle Q

9.  $\overline{LN}$ 

10. triangle RST



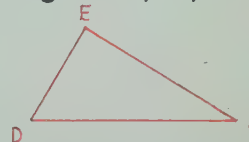
11. angle P larger than a right angle.



12. angle X smaller than a right angle.



13. a triangle with angles D, E, and F.

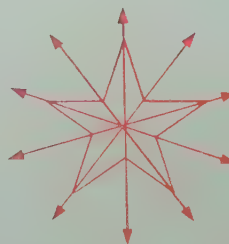


Draw a picture for each of these.  
Show a line of symmetry. Pictures will vary.

14. a bicycle tire

Any line containing the centre is a line of symmetry.




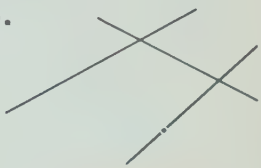
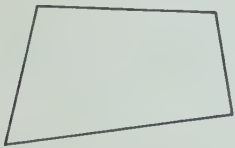



15. a star



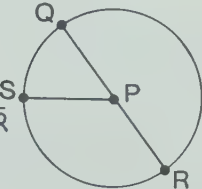
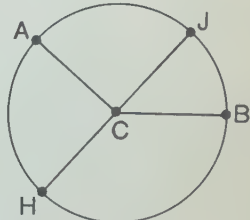


## Polygons

Is it a polygon? If so, name the kind of polygon. Give the number of sides and the number of angles for each polygon.

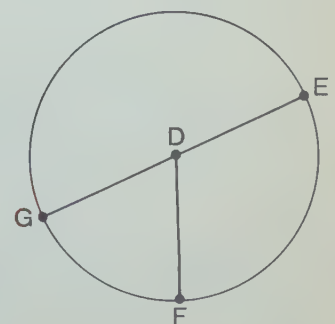
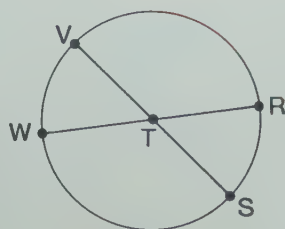
<p>1. </p> <p>pentagon</p> <p><u>5</u> sides</p> <p><u>5</u> angles</p>	<p>2. </p> <p>quadrilateral</p> <p><u>4</u> sides</p> <p><u>4</u> angles</p>	<p>3. </p> <p>hexagon</p> <p><u>6</u> sides</p> <p><u>6</u> angles</p>	<p>4. </p> <p>not a polygon</p> <p>___ sides</p> <p>___ angles</p>
<p>5. </p> <p>quadrilateral</p> <p><u>4</u> sides</p> <p><u>4</u> angles</p>	<p>6. </p> <p>not a polygon</p> <p>___ sides</p> <p>___ angles</p>	<p>7. </p> <p>octagon</p> <p><u>8</u> sides</p> <p><u>8</u> angles</p>	<p>8. </p> <p>pentagon</p> <p><u>5</u> sides</p> <p><u>5</u> angles</p>

## Circles

<p>Name _____</p> <p>1. the centre. <math>P</math></p> <p>2. each radius. <math>\overline{PS}</math>, <math>\overline{PQ}</math>, <math>\overline{PR}</math></p> <p>3. each diameter. <math>\overline{QR}</math></p> 	<p>4. the centre. <math>C</math></p> <p>5. each radius. <math>\overline{CA}</math>, <math>\overline{CB}</math>, <math>\overline{CH}</math>, <math>\overline{CJ}</math></p> <p>6. each diameter. <math>\overline{HJ}</math></p> 
--	--

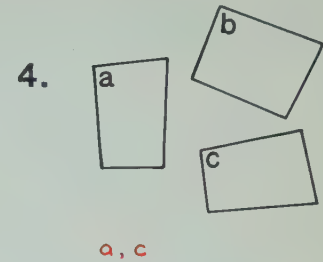
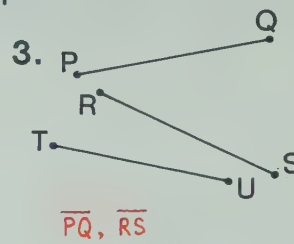
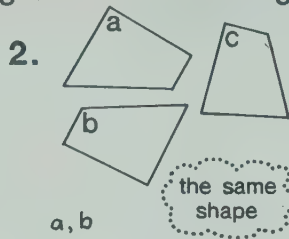
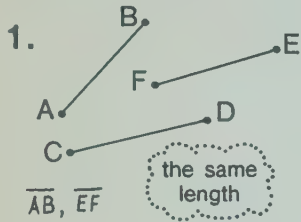
What is

7. the name of this shape? *circle*
8.  $T$ ? *centre*
9.  $\overline{VS}$ ? *diameter*
10.  $\overline{TR}$ ? *radius*
11.  $\overline{WR}$ ? *diameter*
12.  $\overline{DF}$ ? *radius*
13.  $D$ ? *centre*
14.  $\overline{DG}$ ? *radius*
15.  $\overline{GD}$ ? *radius*
16.  $\overline{EG}$ ? *diameter*

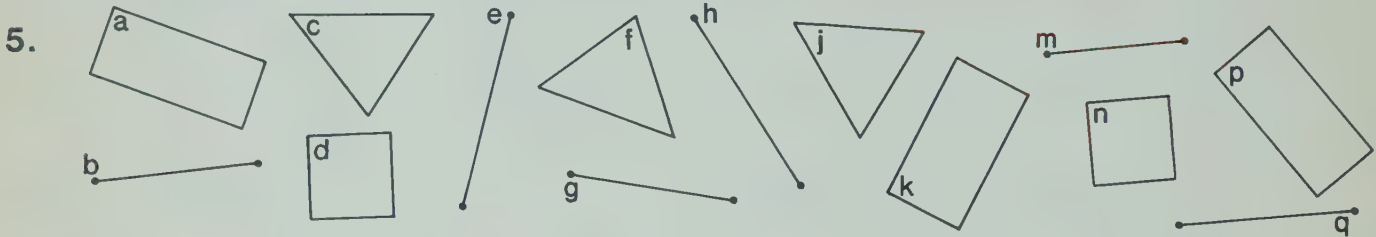


## Congruent Shapes

Which shapes are congruent. Use tracing paper if needed.



Use tracing paper to find five pairs of congruent shapes. a, p c, f d, n b, g e, h



## Solids

For each solid, give the number of vertices, edges, and faces.  
Describe the faces.

1.



8 vertices 12 edges 6 faces  
2 squares, 4 rectangles

2.



10 vertices 15 edges 7 faces  
2 pentagons, 5 rectangles

3.



6 vertices 9 edges 5 faces  
2 triangles, 3 rectangles

4.



7 vertices 12 edges 7 faces  
1 hexagon, 6 triangles

5. Use another sheet of paper. Patterns will vary.  
Sketch a pattern for each solid shown above.



**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 3004 \\ - 729 \\ \hline 2275 \end{array}$$

$$\begin{array}{r} 2. \quad 605 \\ 293 \\ + 741 \\ \hline 1639 \end{array}$$

$$\begin{array}{r} 3. \quad 163 \\ - 95 \\ \hline 68 \end{array}$$

$$\begin{array}{r} 4. \quad \$721 \\ 483 \\ + 619 \\ \hline \$1823 \end{array}$$

$$\begin{array}{r} 5. \quad \$427 \\ - 386 \\ \hline \$41 \end{array}$$

$$\begin{array}{r} 6. \quad \$7914 \\ - 2088 \\ \hline \$5826 \end{array}$$

$$\begin{array}{r} 7. \quad 1176 \\ - 849 \\ \hline 327 \end{array}$$

$$\begin{array}{r} 8. \quad 3987 \\ + 123 \\ \hline 4110 \end{array}$$

$$\begin{array}{r} 9. \quad \$17 \\ + 28 \\ \hline \$45 \end{array}$$

$$\begin{array}{r} 10. \quad 1500 \\ - 585 \\ \hline 915 \end{array}$$

$$11. \quad 420 + 806 + 993 \\ 2219$$

$$12. \quad 2716 - (1213 - 804) \\ 2307$$

$$13. \quad 1741 + 869 + 74 \\ 2684$$

$$14. \quad \$753 - \$201 \\ \$552$$

$$15. \quad (210 - 90) - 30 \\ 90$$

$$16. \quad 210 - (90 - 30) \\ 150$$

Solve. Show your work.

17. Last Saturday the odometer on the car showed 4217 km. This Saturday it shows 5412 km. How far was the car driven this week? 1195 km

18. The hospital has 336 beds. Only 71 are empty. How many patients are there? 265

19. The Vanderlippe family was looking for a new car. They had \$2350 in the bank. The bank also promised a loan of up to \$5750. How much could they spend for the car? \$8100

20. When school opens in the fall, it will have 92, 117, and 89 students in each of its three grades. 298 Altogether, how many students will it have?

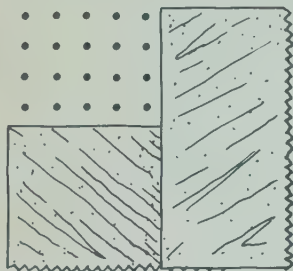
NAME \_\_\_\_\_

SPM4/U5/94-95

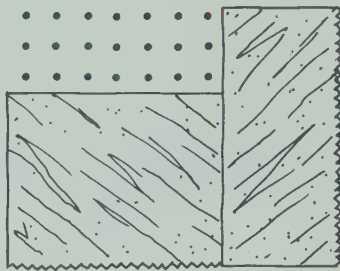
## Basic Facts, One Factor to 5

Multiply.

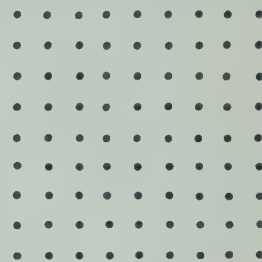
1.  $4 \times 5$  20



2.  $3 \times 7$  21



Cover as needed to help you find the products.



3.  $6 \times 4$  24

4.  $5 \times 2$  10

5.  $2 \times 9$  18

6.  $5 \times 9$  45

7.  $7 \times 3$  21

8.  $6 \times 5$  30

9.  $3 \times 5$  15

10.  $4 \times 7$  28

11.  $7 \times 2$  14

12.  $8 \times 4$  32

13.  $5 \times 7$  35

14.  $2 \times 6$  12

15.  $8 \times 5$  40

16.  $9 \times 3$  27

17.  $3 \times 8$  24

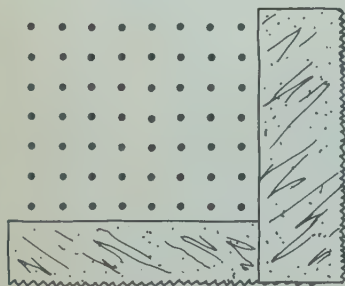
18.  $4 \times 9$  36

SPM4/U5/96-97

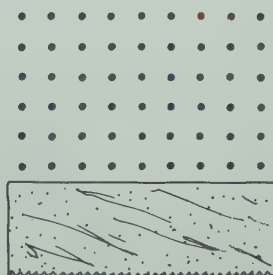
## Finding Products with Factors from 0 to 9

Find each product.

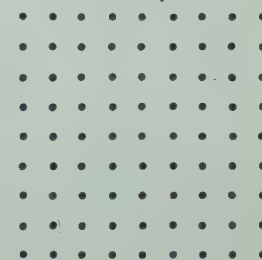
1.  $7 \times 8$  56



2.  $6 \times 9$  54



Cover as needed to help you find the products.



3.  $7 \times 6$  42

4.  $8 \times 9$  72

5.  $6 \times 6$  36

6.  $4 \times 3$  12

7.  $6 \times 8$  48

8.  $6 \times 3$  18

9.  $7 \times 9$  63

10.  $5 \times 5$  25

11.  $3 \times 3$  9

12.  $7 \times 7$  49

13.  $8 \times 2$  16

14.  $8 \times 8$  64

15.  $4 \times 4$  16

16.  $8 \times 7$  56

17.  $9 \times 9$  81

18.  $9 \times 6$  54



## A Table of Basic Multiplication Facts

The "5 times" Table

$$\begin{aligned} 5 \times 0 &= 0 \\ 5 \times 1 &= 5 \\ 5 \times 2 &= 10 \\ 5 \times 3 &= 15 \\ 5 \times 4 &= 20 \\ 5 \times 5 &= 25 \\ 5 \times 6 &= 30 \\ 5 \times 7 &= 35 \\ 5 \times 8 &= 40 \\ 5 \times 9 &= 45 \end{aligned}$$

The "times 7" Table

$$\begin{aligned} 0 \times 7 &= 0 \\ 1 \times 7 &= 7 \\ 2 \times 7 &= 14 \\ 3 \times 7 &= 21 \\ 4 \times 7 &= 28 \\ 5 \times 7 &= 35 \\ 6 \times 7 &= 42 \\ 7 \times 7 &= 49 \\ 8 \times 7 &= 56 \\ 9 \times 7 &= 63 \end{aligned}$$

The Multiplication Basic-Facts Table

x	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9
2	0	2	4	6	8	10	12	14	16	18
3	0	3	6	9	12	15	18	21	24	27
4	0	4	8	12	16	20	24	28	32	36
5	0	5	10	15	20	25	30	35	40	45
6	0	6	12	18	24	30	36	42	48	54
7	0	7	14	21	28	35	42	49	56	63
8	0	8	16	24	32	40	48	56	64	72
9	0	9	18	27	36	45	54	63	72	81

On other paper, write the tables chosen by your teacher from these.

0 times    1 times    2 times    3 times    4 times    5 times    6 times    7 times    8 times    9 times  
 times 0    times 1    times 2    times 3    times 4    times 5    times 6    times 7    times 8    times 9

When finished, use the Basic-Facts Table to check your work.

## Finding the Missing Factor

Complete.

1. <u>5</u> x 4 = 20	2. <u>3</u> x 8 = 24	3. 5 x <u>7</u> = 35
4. <u>4</u> x 2 = 8	5. <u>9</u> x 5 = 45	6. <u>3</u> x 6 = 18
7. <u>7</u> x 3 = 21	8. <u>8</u> x 7 = 56	9. <u>8</u> x 4 = 32
10. <u>4</u> x 9 = 36	11. <u>4</u> x 7 = 28	12. <u>9</u> x 8 = 72
13. 6 x <u>7</u> = 42	14. 2 x <u>8</u> = 16	15. 4 x <u>6</u> = 24
16. 3 x <u>4</u> = 12	17. 5 x <u>5</u> = 25	18. 7 x <u>9</u> = 63
19. 6 x <u>8</u> = 48	20. 9 x <u>2</u> = 18	21. 8 x <u>5</u> = 40
22. 3 x <u>9</u> = 27	23. 9 x <u>9</u> = 81	24. 6 x <u>9</u> = 54

## 10 and Multiples of 10 as Factors

Multiply.

1. $4 \times 60$ 240 4 x 6 tens = 24 tens	2. $8 \times 20$ 160 8 x 2 tens = 16 tens	3. $7 \times 80$ 560	4. $\begin{array}{r l} \times & 40 \\ 6 & 240 \\ 7 & 280 \\ 3 & 120 \end{array}$
--	--	-------------------------	--

5.  $3 \times 70$  210      6.  $6 \times 50$  300      7.  $5 \times 90$  450      8.  $9 \times 60$  540

9. $\begin{array}{r l} \times & 30 \\ 3 & 90 \\ 7 & 210 \\ 5 & 150 \\ 8 & 240 \\ 1 & 30 \\ 6 & 180 \end{array}$	10. $\begin{array}{r l} \times & 90 \\ 7 & 630 \\ 9 & 810 \\ 6 & 540 \\ 4 & 360 \\ 0 & 0 \\ 8 & 720 \end{array}$	11. $\begin{array}{r l} \times & 10 \quad 50 \quad 70 \quad 60 \quad 40 \quad 80 \\ 8 & 80 \quad 400 \quad 560 \quad 480 \quad 320 \quad 640 \end{array}$	12. $\begin{array}{r l} \times & 20 \quad 80 \quad 30 \quad 70 \quad 40 \quad 50 \\ 4 & 80 \quad 320 \quad 120 \quad 280 \quad 160 \quad 200 \end{array}$	13. $\begin{array}{r l} \times & 30 \quad 20 \quad 50 \quad 80 \quad 40 \quad 70 \\ 9 & 270 \quad 180 \quad 450 \quad 720 \quad 360 \quad 630 \end{array}$
---	--	---	---	--

## Multiplying Two - Digit Numbers

Multiply.

1. $\begin{array}{r} 32 \\ 8 \\ \hline 16 \\ 240 \\ \hline 256 \end{array}$ 8 x 2 = 16 8 x 30 = 240	2. $\begin{array}{r} 68 \\ 3 \\ \hline 24 \\ 180 \\ \hline 204 \end{array}$ 3 x 8 = 24 3 x 60 = 180	3. $\begin{array}{r} 25 \\ 7 \\ \hline 175 \end{array}$	4. $\begin{array}{r} 19 \\ 4 \\ \hline 76 \end{array}$	5. $\begin{array}{r} 36 \\ 5 \\ \hline 180 \end{array}$
---	---	---	--	---

6. $\begin{array}{r} 47 \\ 3 \\ \hline 141 \end{array}$	7. $\begin{array}{r} 38 \\ 6 \\ \hline 228 \end{array}$	8. $\begin{array}{r} 25 \\ 9 \\ \hline 225 \end{array}$	9. $\begin{array}{r} 56 \\ 2 \\ \hline 112 \end{array}$	10. $\begin{array}{r} 84 \\ 7 \\ \hline 588 \end{array}$
11. $\begin{array}{r} 44 \\ 4 \\ \hline 176 \end{array}$	12. $\begin{array}{r} 79 \\ 8 \\ \hline 632 \end{array}$	13. $\begin{array}{r} 97 \\ 5 \\ \hline 485 \end{array}$	14. $\begin{array}{r} 64 \\ 9 \\ \hline 576 \end{array}$	15. $\begin{array}{r} 67 \\ 6 \\ \hline 402 \end{array}$

## Practice

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 6042 \\ + 3759 \\ \hline 9801 \end{array}$$

$$\begin{array}{r} 2. \quad \$42.16 \\ - 18.37 \\ \hline \$23.79 \end{array}$$

$$\begin{array}{r} 3. \quad 7 \\ \times 8 \\ \hline 56 \end{array}$$

$$\begin{array}{r} 4. \quad 97 \\ \times 5 \\ \hline 485 \end{array}$$

$$\begin{array}{r} 5. \quad 2004 \\ - 738 \\ \hline 1266 \end{array}$$

$$\begin{array}{r} 6. \quad 217 \\ 493 \\ + 816 \\ \hline 1526 \end{array}$$

$$\begin{array}{r} 7. \quad 74 \\ \times 5 \\ \hline 370 \end{array}$$

$$\begin{array}{r} 8. \quad 1170 \\ 5011 \\ + 2469 \\ \hline 8650 \end{array}$$

$$\begin{array}{r} 9. \quad 3275 \\ - 1596 \\ \hline 1679 \end{array}$$

$$\begin{array}{r} 10. \quad 9 \\ \times 6 \\ \hline 54 \end{array}$$

$$11. \quad 4 \times 63 \quad 252$$

$$12. \quad \$20.95 - \$4.77 \\ \$16.18$$

$$13. \quad 27 + 692 + 805 \\ 1524$$

$$14. \quad 1650 - 1171 \\ 479$$

$$15. \quad 7 \times 81 \\ 567$$

$$16. \quad \$33.73 + \$16.85 \\ \$50.58$$

Solve. Show your work.

17. One box contains 750 screws. Another has 575. A third has 475. How many screws are there in all? **1800**

18. Marta bought 6 packages of cheese. Each package holds 32 slices. How many slices are there in all? **192**

19. The thumbtack box holds 600 tacks when full. Now there are only 123 tacks in the box. How many tacks have been used? **477**

20. Food supplies for camp cost \$37.86. The first-aid kit cost \$17.95. What was the total cost for the food and first-aid kit? **\$55.81**

21. A carton holds 24 packages of cereal. Each package has 8 individual boxes. How many individual boxes are there in the carton? **192**

22. The flight out to the island was 270 km. The direct trip back was only 213 km. How much longer was the flight out? **57 km**



## 100 and Multiples of 100 as Factors

Multiply.

<p>1. <math>5 \times 300</math> 1500</p> <p>5 x 3 hundreds = 15 hundreds</p>	<p>2. <math>4 \times 200</math> 800</p> <p>4 x 2 hundreds = 8 hundreds</p>	<p>3. <math>2 \times 700</math></p> <p>1400</p>	<p>4. <math>\begin{array}{r l} x &amp; 700 \\ 7 &amp; 4900 \\ 4 &amp; 2800 \\ 8 &amp; 5600 \end{array}</math></p>
<p>5. <math>3 \times 800</math> 2400</p>	<p>6. <math>4 \times 400</math> 1600</p>	<p>7. <math>7 \times 600</math> 4200</p>	<p>8. <math>8 \times 300</math> 2400</p>
<p>9. <math>\begin{array}{r l} x &amp; 900 \\ 6 &amp; 5400 \\ 2 &amp; 1800 \\ 7 &amp; 6300 \\ 1 &amp; 900 \\ 9 &amp; 8100 \\ 4 &amp; 3600 \end{array}</math></p>	<p>10. <math>\begin{array}{r l} x &amp; 600 \\ 8 &amp; 4800 \\ 0 &amp; 0 \\ 5 &amp; 3000 \\ 2 &amp; 1200 \\ 4 &amp; 2400 \\ 6 &amp; 3600 \end{array}</math></p>	<p>11. <math>\begin{array}{r l} x &amp; 200 &amp; 300 &amp; 700 &amp; 900 &amp; 400 &amp; 600 \\ 3 &amp; 600 &amp; 900 &amp; 2100 &amp; 2700 &amp; 1200 &amp; 1800 \end{array}</math></p>	<p>12. <math>\begin{array}{r l} x &amp; 500 &amp; 200 &amp; 700 &amp; 400 &amp; 100 &amp; 900 \\ 5 &amp; 2500 &amp; 1000 &amp; 3500 &amp; 2000 &amp; 500 &amp; 4500 \end{array}</math></p>
		<p>13. <math>\begin{array}{r l} x &amp; 400 &amp; 100 &amp; 800 &amp; 200 &amp; 900 &amp; 500 \\ 8 &amp; 3200 &amp; 800 &amp; 6400 &amp; 1600 &amp; 7200 &amp; 4000 \end{array}</math></p>	

## Multiplying Three - Digit Numbers

<p>Multiply.</p> <p>1. <math>\begin{array}{r} 438 \\ \times 3 \\ \hline 24 \\ 90 \\ 1200 \\ \hline 1314 \end{array}</math></p> <p>24 ← 3 x 8 90 ← 3 x 30 1200 ← 3 x 400</p>	<p>2. <math>\begin{array}{r} 267 \\ \times 5 \\ \hline 35 \\ 300 \\ 1000 \\ \hline 1335 \end{array}</math></p> <p>35 ← 5 x 7 300 ← 5 x 60 1000 ← 5 x 200</p>	<p>3. <math>\begin{array}{r} 517 \\ \times 3 \\ \hline 1551 \end{array}</math></p>	<p>4. <math>\begin{array}{r} 384 \\ \times 4 \\ \hline 1536 \end{array}</math></p>
---	--	--	--

<p>5. <math>\begin{array}{r} 736 \\ \times 2 \\ \hline 1472 \end{array}</math></p>	<p>6. <math>\begin{array}{r} 684 \\ \times 6 \\ \hline 4104 \end{array}</math></p>	<p>7. <math>\begin{array}{r} 562 \\ \times 9 \\ \hline 5058 \end{array}</math></p>	<p>8. <math>\begin{array}{r} 794 \\ \times 7 \\ \hline 5558 \end{array}</math></p>	<p>9. <math>\begin{array}{r} 185 \\ \times 8 \\ \hline 1480 \end{array}</math></p>
--	--	--	--	--

## The Standard Form for Multiplication

Multiply. Use the standard form.

1. $\begin{array}{r} 36 \\ \times 4 \\ \hline 144 \end{array}$	2. $\begin{array}{r} 47 \\ \times 6 \\ \hline 282 \end{array}$	3. $\begin{array}{r} 68 \\ \times 3 \\ \hline 204 \end{array}$	4. $\begin{array}{r} 85 \\ \times 6 \\ \hline 510 \end{array}$	5. $\begin{array}{r} 16 \\ \times 7 \\ \hline 112 \end{array}$
--	--	--	--	--

$$\begin{array}{r} 6. 59 \\ \times 2 \\ \hline 118 \end{array}$$

$$\begin{array}{r} 7. 48 \\ \times 4 \\ \hline 192 \end{array}$$

$$\begin{array}{r} 8. 80 \\ \times 8 \\ \hline 640 \end{array}$$

$$\begin{array}{r} 9. 23 \\ \times 7 \\ \hline 161 \end{array}$$

$$\begin{array}{r} 10. 73 \\ \times 9 \\ \hline 657 \end{array}$$

$$\begin{array}{r} 11. 375 \\ \times 8 \\ \hline 3000 \end{array}$$

$$\begin{array}{r} 12. 485 \\ \times 5 \\ \hline 2425 \end{array}$$

$$\begin{array}{r} 13. 408 \\ \times 7 \\ \hline 2856 \end{array}$$

$$\begin{array}{r} 14. 917 \\ \times 4 \\ \hline 3668 \end{array}$$

$$\begin{array}{r} 15. 861 \\ \times 9 \\ \hline 7749 \end{array}$$

$$\begin{array}{r} 16. 649 \\ \times 8 \\ \hline 5192 \end{array}$$

$$\begin{array}{r} 17. 945 \\ \times 9 \\ \hline 8505 \end{array}$$

$$\begin{array}{r} 18. 609 \\ \times 5 \\ \hline 3045 \end{array}$$

$$\begin{array}{r} 19. 537 \\ \times 3 \\ \hline 1611 \end{array}$$

$$\begin{array}{r} 20. 962 \\ \times 6 \\ \hline 5772 \end{array}$$

## Multiplying Dollars and Cents

Multiply.

1. $\begin{array}{r} \$2.89 \\ \times 5 \\ \hline \$14.45 \end{array}$	2. $\begin{array}{r} \$6.13 \\ \times 7 \\ \hline \$42.91 \end{array}$	3. $\begin{array}{r} \$9.26 \\ \times 6 \\ \hline \$55.56 \end{array}$	4. $\begin{array}{r} \$1.48 \\ \times 4 \\ \hline \$5.92 \end{array}$	5. $\begin{array}{r} \$0.86 \\ \times 3 \\ \hline \$2.58 \end{array}$
--	--	--	---	---

$$\begin{array}{r} 6. \$0.73 \\ \times 4 \\ \hline \$2.92 \end{array}$$

$$\begin{array}{r} 7. \$7.39 \\ \times 3 \\ \hline \$22.17 \end{array}$$

$$\begin{array}{r} 8. \$9.46 \\ \times 2 \\ \hline \$18.92 \end{array}$$

$$\begin{array}{r} 9. \$5.34 \\ \times 5 \\ \hline \$26.70 \end{array}$$

$$\begin{array}{r} 10. \$4.57 \\ \times 8 \\ \hline \$36.56 \end{array}$$

$$\begin{array}{r} 11. \$7.34 \\ \times 6 \\ \hline \$44.04 \end{array}$$

$$\begin{array}{r} 12. \$3.61 \\ \times 9 \\ \hline \$32.49 \end{array}$$

$$\begin{array}{r} 13. \$0.49 \\ \times 7 \\ \hline \$3.43 \end{array}$$

$$\begin{array}{r} 14. \$2.09 \\ \times 9 \\ \hline \$18.81 \end{array}$$

$$\begin{array}{r} 15. \$0.12 \\ \times 8 \\ \hline \$0.96 \end{array}$$

## More Than Two Factors

Multiply. Use other paper as needed.

$\begin{array}{l} \text{54} \times 4 \\ \hline 1. 6 \times 9 \times 4 \quad 216 \\ \hline 6 \times 36 \end{array}$	$\begin{array}{l} \text{12} \times 7 \\ \hline 2. 4 \times 3 \times 7 \quad 84 \\ \hline 4 \times 21 \end{array}$	$\begin{array}{l} 3. 7 \times 2 \times 6 \quad 84 \\ 4. 2 \times 8 \times 3 \times 5 \quad 240 \end{array}$
--	---	---

5.  $2 \times 3 \times 4 \quad 24$

6.  $5 \times 7 \times 7 \quad 245$

7.  $3 \times 4 \times 5 \quad 60$

8.  $1 \times 6 \times 5 \quad 30$

9.  $1 \times 4 \times 4 \times 6 \quad 96$

10.  $6 \times 0 \times 7 \quad 0$

11.  $8 \times 3 \times 9 \times 5 \quad 1080$

12.  $2 \times 9 \times 1 \times 9 \quad 162$

13.  $7 \times 1 \times 8 \times 2 \quad 112$

14.  $3 \times 8 \times 4 \quad 96$

15.  $4 \times 3 \times 6 \times 6 \quad 432$

16.  $7 \times 2 \times 5 \times 9 \quad 630$

SPM4/U5/122

## Multiplication, Addition, and Subtraction Together

Perform the indicated operations. Work inside the parentheses first. Use other paper as needed.

$\begin{array}{r} 67 \\ + 44 \\ \hline 111 \end{array} \quad \begin{array}{r} 111 \\ \times 3 \\ \hline 333 \end{array}$	$\begin{array}{r} 81 \\ \times 7 \\ \hline \end{array} \quad 528$	$\begin{array}{l} 3. (81 \times 3) - 7 \quad 236 \\ 4. (81 - 3) \times 7 \quad 546 \end{array}$
--	---	---

5.  $(52 \times 7) - 160 \quad 204$

6.  $394 + (260 \times 8) \quad 2474$

7.  $(394 + 260) \times 8 \quad 5232$

8.  $(35 + 518) \times 3 \quad 1659$

9.  $35 + (518 \times 3) \quad 1589$

10.  $(35 \times 3) + 518 \quad 623$

11.  $3000 - (323 \times 3) \quad 2031$

12.  $52 \times (740 - 732) \quad 416$

13.  $(2001 - 643) \times 4 \quad 5432$

14.  $200 \times (200 - 192) \quad 1600$

15.  $(438 \times 7) + 4387 \quad 7453$

16.  $2005 - (238 \times 6) \quad 577$



## Practice

Perform the indicated operation.

$$\begin{array}{r} 1. \quad \$41.63 \\ - 17.85 \\ \hline \$23.78 \end{array}$$

$$\begin{array}{r} 2. \quad 200 \\ \times 7 \\ \hline 1400 \end{array}$$

$$\begin{array}{r} 3. \quad 468 \\ 723 \\ + 845 \\ \hline 2036 \end{array}$$

$$\begin{array}{r} 4. \quad 46 \\ \times 9 \\ \hline 414 \end{array}$$

$$\begin{array}{r} 5. \quad \$4.37 \\ \times 5 \\ \hline \$21.85 \end{array}$$

$$\begin{array}{r} 6. \quad 4391 \\ - 2435 \\ \hline 1956 \end{array}$$

$$\begin{array}{r} 7. \quad 862 \\ \times 3 \\ \hline 2586 \end{array}$$

$$\begin{array}{r} 8. \quad \$21.70 \\ 43.86 \\ + 24.81 \\ \hline \$90.37 \end{array}$$

$$\begin{array}{r} 9. \quad \$1471 \\ - 896 \\ \hline \$575 \end{array}$$

$$\begin{array}{r} 10. \quad 583 \\ \times 6 \\ \hline 3498 \end{array}$$

$$11. \quad \$20.07 - \$8.68 \\ \$11.39$$

$$12. \quad 3 \times 8 \times 7 \\ 168$$

$$13. \quad 756 - (83 + 142) \\ 531$$

$$14. \quad (12 - 7) \times 5 \\ 25$$

$$15. \quad 10 \times 8 \\ 80$$

$$16. \quad (91 - 88) \times 148 \\ 444$$

Solve. Show your work.

17. Winifred is saving her \$1.75 allowance each week. How much will she have in 4 weeks?  $\$7.00$

18. The film could be shown to 175 persons 4 times each hour. How many persons could see the film in 8 h?  $5600$

19. Rona was given \$50.00 to buy supplies for the office. Her purchases amounted to \$27.53. How much did she have to return to the office?  $\$22.47$

20. The builder charged \$47.50 for painting, \$23.60 for carpentry, and \$17.95 for materials. What was the total bill?  $\$89.05$

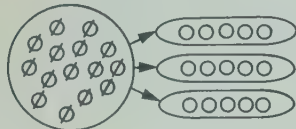
21. Cupcakes come from the bakery, 2 in each package. A box contains 36 packages. A carton contains 6 boxes. How many cupcakes does a carton hold?  $432$

22. 500 envelopes come in a box. Jon has 4 boxes. How many envelopes does Jon have?  $2000$

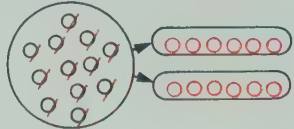
# Sharing

Draw a picture and complete the division fact.

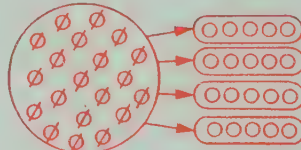
1.  $15 \div 3 = \underline{5}$



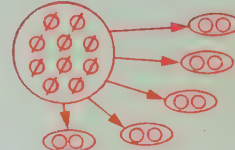
2.  $12 \div 2 = \underline{6}$



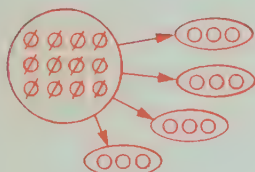
3.  $20 \div 4 = \underline{5}$



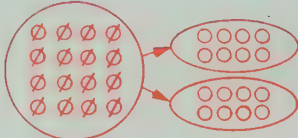
4.  $10 \div 5 = \underline{2}$



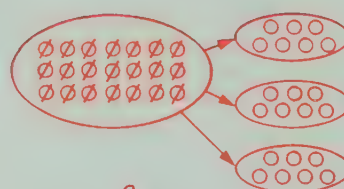
5.  $12 \div 4 = \underline{3}$



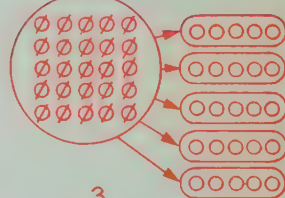
6.  $16 \div 2 = \underline{8}$



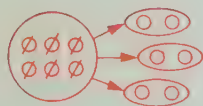
7.  $21 \div 3 = \underline{7}$



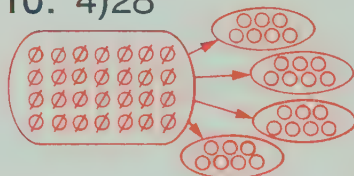
8.  $25 \div 5 = \underline{5}$



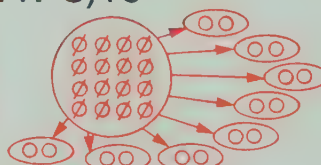
9.  $3 \overline{)6}$



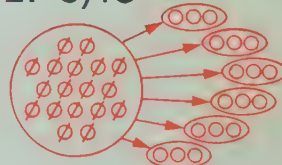
10.  $4 \overline{)28}$



11.  $8 \overline{)16}$



12.  $6 \overline{)18}$

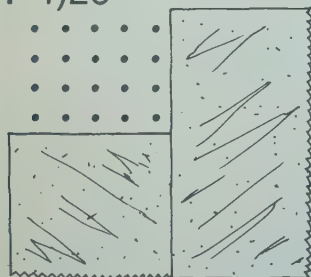


SPM4/U6/130-131

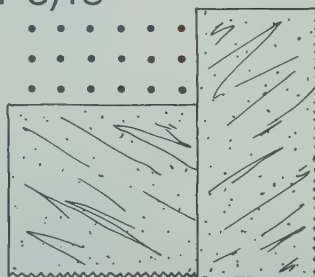
## Finding the Quotient

Find the quotient.

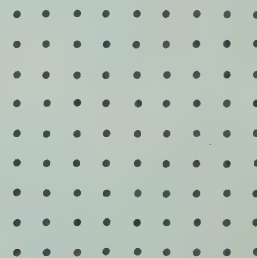
1.  $4 \overline{)20}$



2.  $3 \overline{)18}$



Cover as needed to help you find the quotient.



3.  $3 \overline{)21}$

4.  $5 \overline{)30}$

5.  $9 \overline{)54}$

6.  $6 \overline{)24}$

7.  $2 \overline{)18}$

8.  $7 \overline{)42}$

9.  $8 \overline{)32}$

10.  $3 \overline{)12}$

11.  $5 \overline{)45}$

12.  $9 \overline{)27}$

13.  $7 \overline{)56}$

14.  $6 \overline{)48}$

15.  $8 \overline{)72}$

16.  $4 \overline{)28}$

17.  $2 \overline{)10}$

## Related Multiplication and Division Facts

Write the complete family of facts for each group of numbers.

<b>1. 5, 7, 35</b> $5 \times 7 = 35$ $7 \times 5 = 35$ $35 \div 7 = 5$ $35 \div 5 = 7$	<b>2. 9, 4, 36</b> $9 \times 4 = 36$ $4 \times 9 = 36$ $36 \div 4 = 9$ $36 \div 9 = 4$	<b>3. 6, 7, 42</b> $6 \times 7 = 42$ $7 \times 6 = 42$ $42 \div 6 = 7$ $42 \div 7 = 6$	<b>4. 6, 8, 48</b> $6 \times 8 = 48$ $8 \times 6 = 48$ $48 \div 6 = 8$ $48 \div 8 = 6$
--	--	--	--

<b>5. 5, 6, 30</b> $5 \times 6 = 30$ $6 \times 5 = 30$ $30 \div 5 = 6$ $30 \div 6 = 5$	<b>6. 4, 7, 28</b> $4 \times 7 = 28$ $7 \times 4 = 28$ $28 \div 4 = 7$ $28 \div 7 = 4$	<b>7. 8, 7, 56</b> $8 \times 7 = 56$ $7 \times 8 = 56$ $56 \div 8 = 7$ $56 \div 7 = 8$	<b>8. 8, 3, 24</b> $8 \times 3 = 24$ $3 \times 8 = 24$ $24 \div 8 = 3$ $24 \div 3 = 8$
<b>9. 9, 8, 72</b> $9 \times 8 = 72$ $8 \times 9 = 72$ $72 \div 9 = 8$ $72 \div 8 = 9$	<b>10. 3, 6, 18</b> $3 \times 6 = 18$ $6 \times 3 = 18$ $18 \div 3 = 6$ $18 \div 6 = 3$	<b>11. 4, 6, 24</b> $4 \times 6 = 24$ $6 \times 4 = 24$ $24 \div 4 = 6$ $24 \div 6 = 4$	<b>12. 9, 5, 45</b> $9 \times 5 = 45$ $5 \times 9 = 45$ $45 \div 9 = 5$ $45 \div 5 = 9$

## Using Multiplication to Divide

Divide. Show the multiplication fact you use.

<b>1.</b> $9 \overline{)36}$ $9 \times 4 = 36$	<b>2.</b> $7 \overline{)56}$ $7 \times 8 = 56$	<b>3.</b> $4 \overline{)28}$	<b>4.</b> $2 \overline{)18}$	<b>5.</b> $6 \overline{)48}$
---	---	------------------------------	------------------------------	------------------------------

<b>6.</b> $6 \overline{)24}$	<b>7.</b> $7 \overline{)42}$	<b>8.</b> $8 \overline{)32}$	<b>9.</b> $5 \overline{)30}$	<b>10.</b> $3 \overline{)12}$
<b>11.</b> $6 \overline{)12}$	<b>12.</b> $9 \overline{)63}$	<b>13.</b> $5 \overline{)40}$	<b>14.</b> $7 \overline{)35}$	<b>15.</b> $3 \overline{)24}$
<b>16.</b> $8 \overline{)64}$	<b>17.</b> $2 \overline{)14}$	<b>18.</b> $9 \overline{)54}$	<b>19.</b> $5 \overline{)15}$	<b>20.</b> $4 \overline{)16}$



## Practice

Perform the indicated operation.

$$\begin{array}{r} 1. \quad \$27.41 \\ + 56.32 \\ \hline \$83.73 \end{array}$$

$$\begin{array}{r} 2. \quad 432 \\ \times 6 \\ \hline 2592 \end{array}$$

$$\begin{array}{r} 3. \quad 1903 \\ + 5677 \\ \hline 7580 \end{array}$$

$$4. \quad \overset{8}{7} \overline{)56}$$

$$\begin{array}{r} 5. \quad 38 \\ \times 7 \\ \hline 266 \end{array}$$

$$\begin{array}{r} 6. \quad 2107 \\ - 485 \\ \hline 1622 \end{array}$$

$$\begin{array}{r} 7. \quad \$10.03 \\ - 3.74 \\ \hline \$ 6.29 \end{array}$$

$$8. \quad 9 \overline{)72}^8$$

$$\begin{array}{r} 9. \quad 6304 \\ 295 \\ + 1784 \\ \hline 8383 \end{array}$$

$$\begin{array}{r} 10. \quad 500 \\ \times 3 \\ \hline 1500 \end{array}$$

$$11. \quad 56 \div 7 \quad 8$$

$$12. \quad \$402 - \$179 \\ \$223$$

$$13. \quad 7 \times 2 \times 5 \times 3 \\ 210$$

$$14. \quad 217 + 804 + 193 \\ 1214$$

$$15. \quad 3 \times 5 \times 2 \times 4 \\ 120$$

$$16. \quad 7 \times (140 - 88) \\ 364$$

Solve. Show your work.

17. Many's father won a contest at the grocery store. To claim the prize he had to answer this "skill-testing question."  
 $4000 - (378 \times 6) + 982 = ?$   
 What is the correct answer? **750**

18. The hardware company buys a case of light bulbs. The case holds 3 cartons. A carton holds 6 packages. Each package holds 4 bulbs. How many bulbs are in the case? **72**

19. This summer the grain harvest at the MacLeod farm was 4294 kg. Last year it was only 3716 kg. How much larger is the crop this year? **578 kg**

20. Toby has 54 rabbits. He wants to put an equal number in each pen. He has 6 pens. How many rabbits should he put in each pen? **9**

21. The Lawry family car holds 54 L of gasoline. When Mrs. Lawry had it filled, it took 37 L. How many litres were already in it? **17**

22. Jean had \$87.16 in his savings account. The bank added \$5.88 interest. Now how much does he have? **\$93.04**

## Finding the Number of Groups

Divide. Show the multiplication fact you use.

1. $4 \overline{)36}$ $4 \times 9 = 36$	2. $8 \overline{)56}$ $8 \times \underline{7} = 56$	3. $7 \overline{)28}$	4. $9 \overline{)18}$	5. $8 \overline{)48}$
--	--	-----------------------	-----------------------	-----------------------

6.  $4 \overline{)24}$

7.  $6 \overline{)42}$

8.  $4 \overline{)32}$

9.  $6 \overline{)30}$

10.  $4 \overline{)12}$

11.  $2 \overline{)12}$

12.  $7 \overline{)63}$

13.  $8 \overline{)40}$

14.  $5 \overline{)35}$

15.  $8 \overline{)24}$

16.  $6 \overline{)36}$

17.  $7 \overline{)14}$

18.  $6 \overline{)54}$

19.  $3 \overline{)15}$

20.  $7 \overline{)49}$

## Extending the Division Facts

Divide.

1. $3 \overline{)150}$ $3 \times 50 = 150$	2. $5 \overline{)200}$ $5 \times \underline{40} = 200$	3. $6 \overline{)180}$	4. $4 \overline{)160}$	5. $6 \overline{)300}$
---	---	------------------------	------------------------	------------------------

6.  $7 \overline{)210}$

7.  $8 \overline{)480}$

8.  $8 \overline{)320}$

9.  $2 \overline{)120}$

10.  $5 \overline{)350}$

11.  $4 \overline{)280}$

12.  $7 \overline{)420}$

13.  $2 \overline{)180}$

14.  $8 \overline{)640}$

15.  $4 \overline{)360}$

16.  $2 \overline{)60}$

17.  $9 \overline{)630}$

18.  $8 \overline{)160}$

19.  $9 \overline{)810}$

20.  $5 \overline{)400}$

## Remainders

Divide. Show the quotient and the remainder.

$\begin{array}{r} 4 \text{ R } 2 \\ 9 \overline{)38} \\ \underline{36} \phantom{0} \\ 2 \end{array}$ <p><math>9 \times 4 = 36</math></p>	$\begin{array}{r} 5 \text{ R } 3 \\ 5 \overline{)28} \\ \underline{25} \phantom{0} \\ 3 \end{array}$ <p><math>5 \times 5 = 25</math></p>	$\begin{array}{r} 7 \text{ R } 4 \\ 8 \overline{)60} \end{array}$	$\begin{array}{r} 5 \text{ R } 3 \\ 4 \overline{)23} \end{array}$	$\begin{array}{r} 7 \text{ R } 3 \\ 7 \overline{)52} \end{array}$
$\begin{array}{r} 3 \text{ R } 2 \\ 8 \overline{)26} \end{array}$	$\begin{array}{r} 6 \text{ R } 4 \\ 9 \overline{)58} \end{array}$	$\begin{array}{r} 6 \text{ R } 2 \\ 3 \overline{)20} \end{array}$	$\begin{array}{r} 6 \text{ R } 2 \\ 6 \overline{)38} \end{array}$	$\begin{array}{r} 4 \text{ R } 3 \\ 4 \overline{)19} \end{array}$
$\begin{array}{r} 5 \text{ R } 6 \\ 7 \overline{)41} \end{array}$	$\begin{array}{r} 9 \text{ R } 1 \\ 3 \overline{)28} \end{array}$	$\begin{array}{r} 5 \text{ R } 1 \\ 2 \overline{)11} \end{array}$	$\begin{array}{r} 7 \text{ R } 7 \\ 8 \overline{)63} \end{array}$	$\begin{array}{r} 7 \text{ R } 2 \\ 4 \overline{)30} \end{array}$
$\begin{array}{r} 2 \text{ R } 3 \\ 8 \overline{)19} \end{array}$	$\begin{array}{r} 7 \text{ R } 1 \\ 2 \overline{)15} \end{array}$	$\begin{array}{r} 2 \text{ R } 8 \\ 9 \overline{)26} \end{array}$	$\begin{array}{r} 8 \text{ R } 5 \\ 6 \overline{)53} \end{array}$	$\begin{array}{r} 9 \text{ R } 4 \\ 5 \overline{)49} \end{array}$

## Practice

Solve. Show your work.

- 3 persons agree to share equally a job of addressing 120 envelopes. How many will each have to address?  $40$
- If the Chens drive 125 km after lunch, they will cover 304 km today. How far have they gone already?  $179 \text{ km}$
- The 54 recruits will be divided equally into 6 squads. How many will be in each squad?  $9$
- Ticket sales for the three performances of the play are \$36.75, \$29.15 and \$27.00. What is the total?  $\$92.90$
- Each student in the school volunteers to make 4 items for the Autumn Craft Sale. There are 168 students in the school. How many items will they make in all?  $672$
- The river splits into 2 branches. Each branch has 6 boathouses. Each boathouse has 7 boats. How many boats are there in all?  $84$



**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 3017 \\ - 486 \\ \hline 2531 \end{array}$$

$$\begin{array}{r} 2. \quad \$2780 \\ 4216 \\ + 1539 \\ \hline \$8535 \end{array}$$

$$\begin{array}{r} 3. \quad 435 \\ \times 7 \\ \hline 3045 \end{array}$$

$$\begin{array}{r} 4. \quad 21 \\ \times 0 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 5. \quad \$16.25 \\ 43.93 \\ + 17.08 \\ \hline \$77.26 \end{array}$$

$$\begin{array}{r} 6. \quad \$7.34 \\ \times 5 \\ \hline \$36.70 \end{array}$$

$$7. \quad 9 \overline{)630}^{70}$$

$$\begin{array}{r} 8. \quad 600 \\ \times 7 \\ \hline 4200 \end{array}$$

$$\begin{array}{r} 9. \quad \$16.07 \\ - 3.21 \\ \hline \$12.86 \end{array}$$

$$10. \quad 7 \overline{)56}^8$$

$$11. \quad 1238 - 715 \\ 523$$

$$12. \quad (3 + 4) \times 412 \\ 2884$$

$$13. \quad (17 \times 9) - 149 \\ 4$$

$$14. \quad 7 \times 3 \times 8 \times 2 \\ 336$$

$$15. \quad 86 + 419 + 307 \\ 812$$

$$16. \quad (1335 + 1665) - 1536 \\ 1464$$

Solve. Show your work.

17. The Pryor's bank account had \$7615 in it. They withdrew \$1955 to take a trip. How much does that leave in the account?  $\$5660$

18. On one of its best days, Meg's business had \$5388 in direct sales and \$3574 in mail orders. What was the sales total for the day?  $\$8962$

19. Raffle tickets come 10 in a book. Giovanni has sold 9 books. How many tickets has he sold?  $90$

20. Vito solved the cube puzzle in 175 s. Angelo took 232 s. How much longer did Angelo take?  $57 \text{ s}$

21. When the tournament was postponed, the coach called 6 parents. Each parent called 6 more parents, each of whom called 6 more. In this way, how many were told of the postponement?  $216$

22. Diesel fuel needs for the farm were 3217 L in June, 3075 L in July, and 2871 L in August. How much fuel was used in all during the three months?  $9163 \text{ L}$

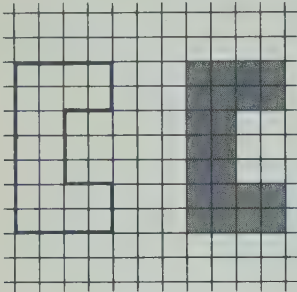
NAME \_\_\_\_\_

SPM4/U7/148-149

## Motions for Matching Congruent Shapes

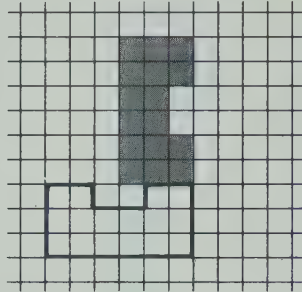
Use tracing paper. Tell whether you can slide, flip, or turn a tracing of the white shape to match the gray shape.

1.



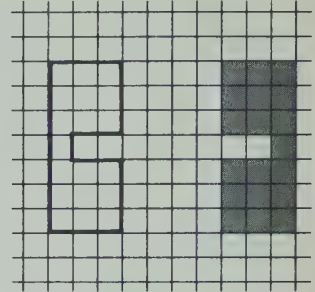
slide

2.



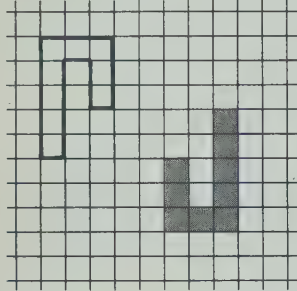
turn

3.



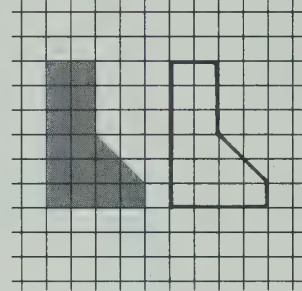
flip

4.



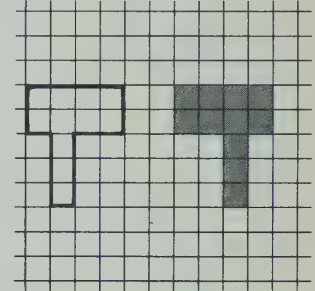
turn

5.



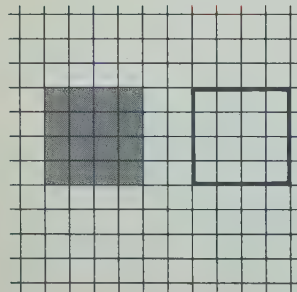
slide

6.



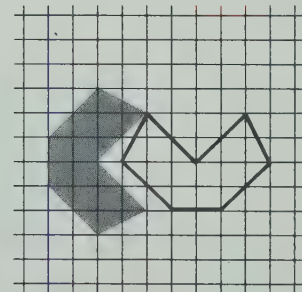
flip

7.



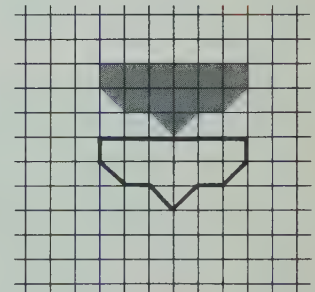
slide, flip or turn

8.



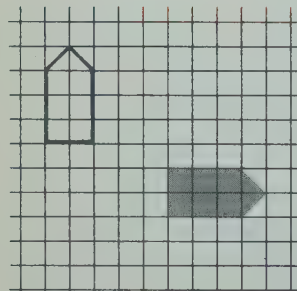
turn

9.



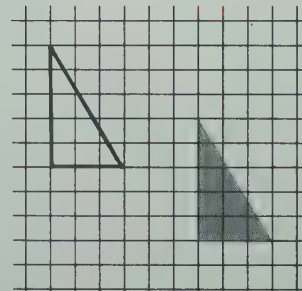
slide

10.



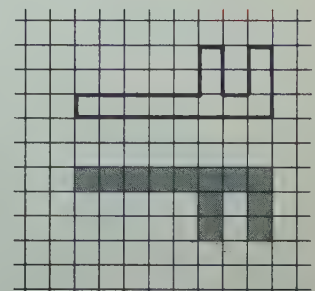
turn

11.



slide

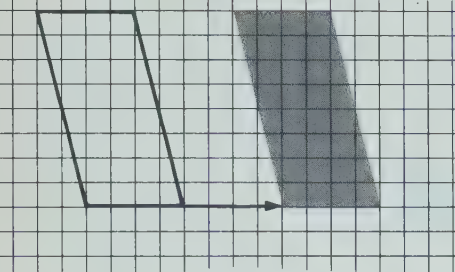
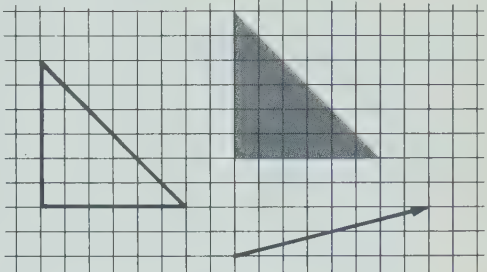
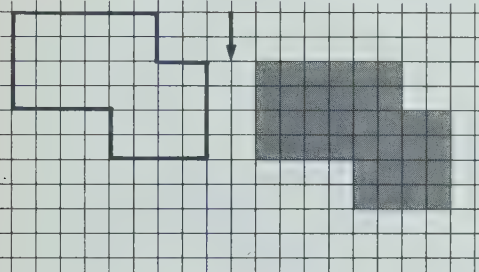
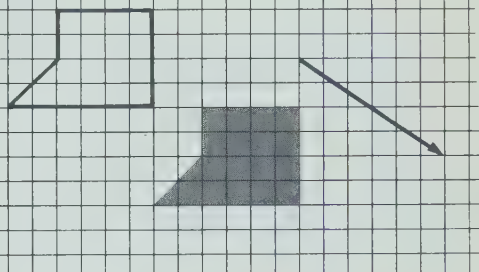
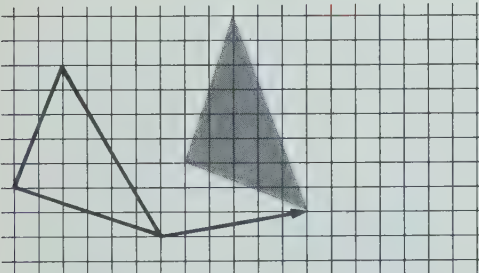
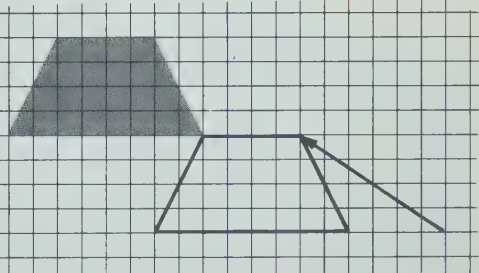
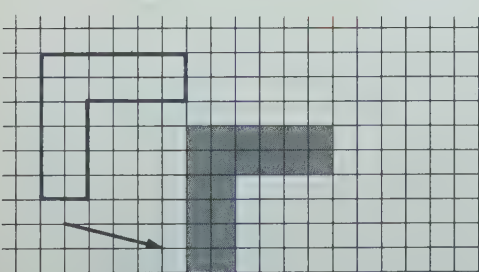
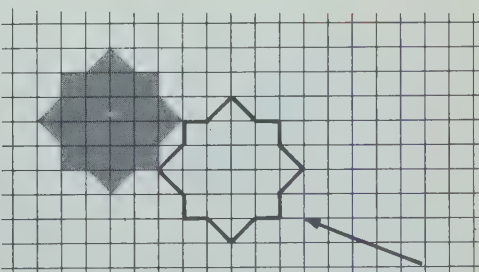
12.



flip

## Slides

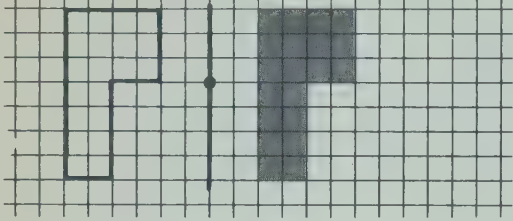
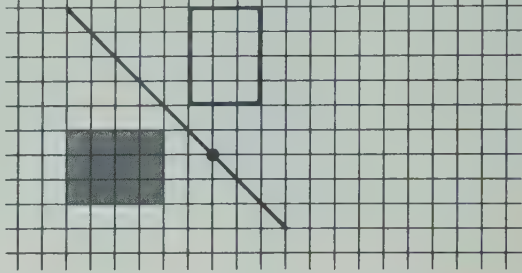
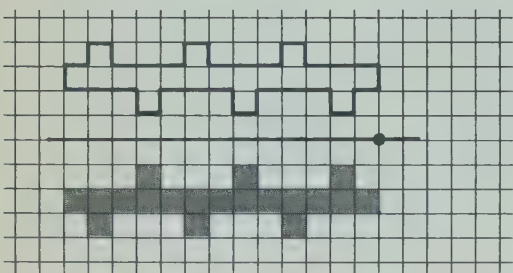
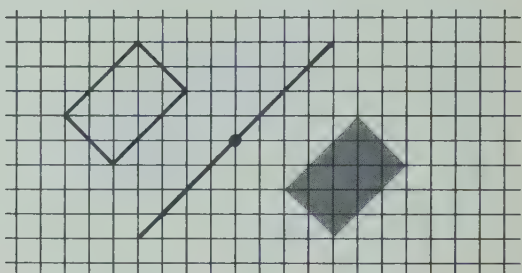
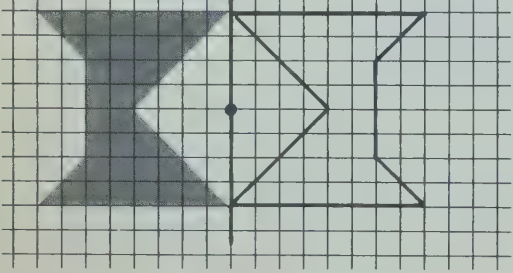
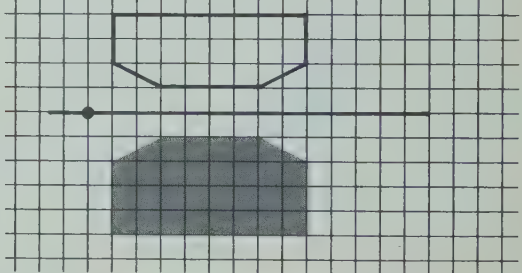
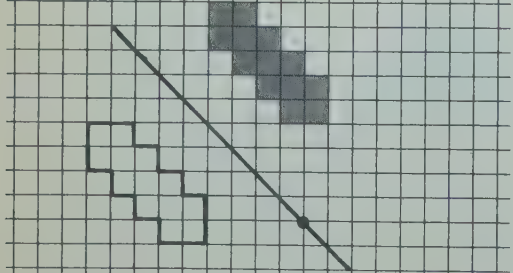
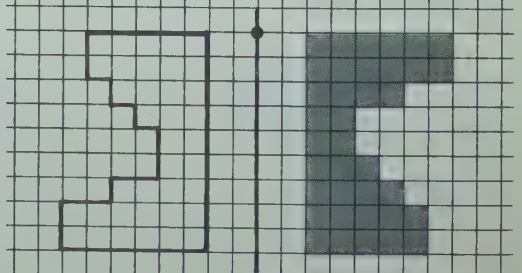
Use tracing paper. Test whether the gray shape is the slide image of the white shape for the given slide arrow.

<p>1.</p>  <p>no</p> <p>slide arrow too short!</p>	<p>2.</p>  <p>yes</p>
<p>3.</p>  <p>no</p>	<p>4.</p>  <p>yes</p>
<p>5.</p>  <p>no</p>	<p>6.</p>  <p>yes</p>
<p>7.</p>  <p>no</p>	<p>8.</p>  <p>yes</p>



## Flips

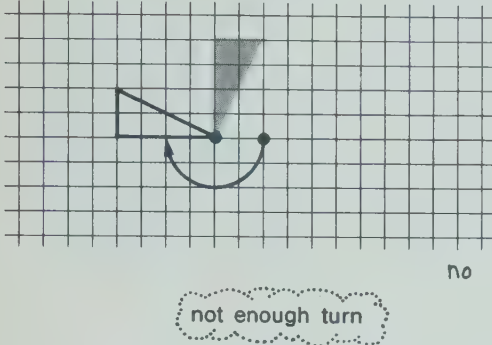
Use tracing paper. Test whether the gray shape is the flip image of the white shape for the given flip line.

<p>1.</p>  <p>no</p> <p>gray shape is not "flipped"</p>	<p>2.</p>  <p>yes</p>
<p>3.</p>  <p>yes</p>	<p>4.</p>  <p>no</p>
<p>5.</p>  <p>yes</p>	<p>6.</p>  <p>no</p>
<p>7.</p>  <p>yes</p>	<p>8.</p>  <p>no</p>

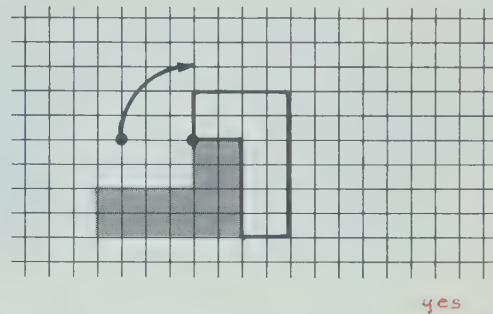
## Turns

Use tracing paper. Test whether the gray shape is the turn image of the white shape for the given turn centre and turn arrow.

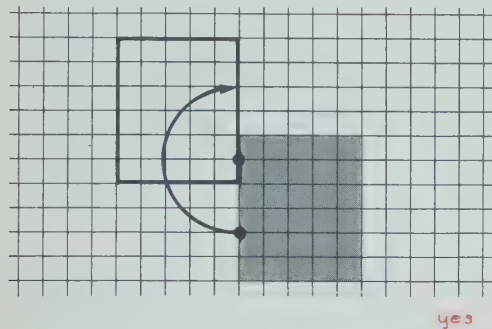
1.



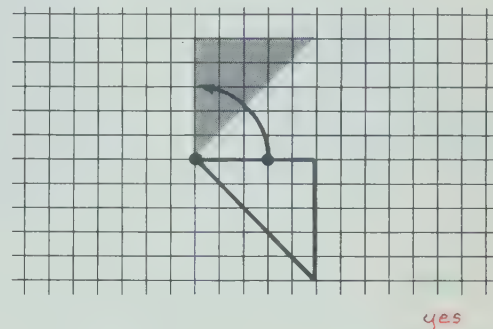
2.



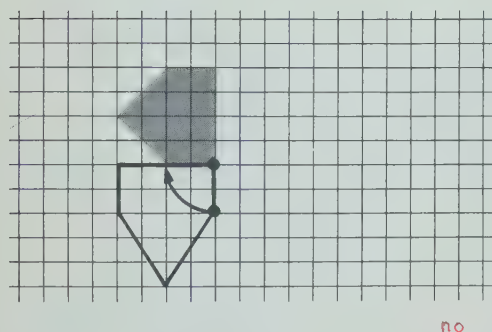
3.



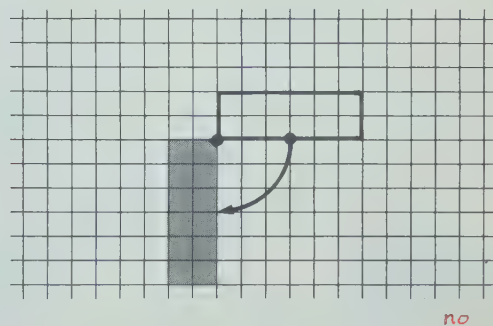
4.



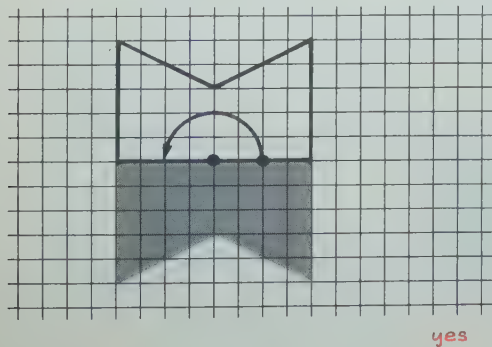
5.



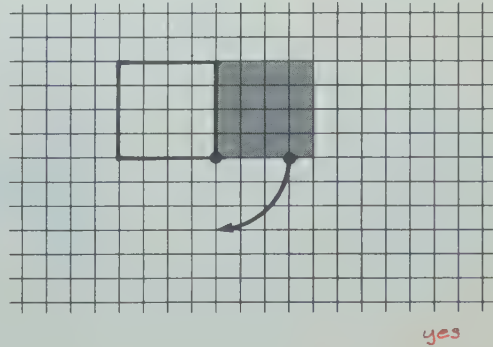
6.



7.



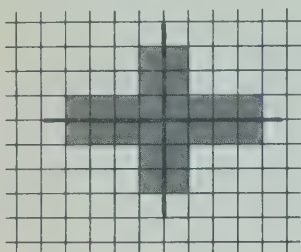
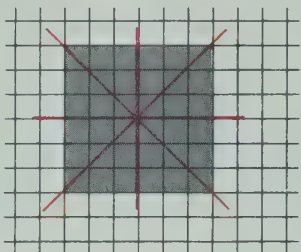
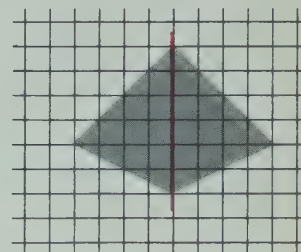
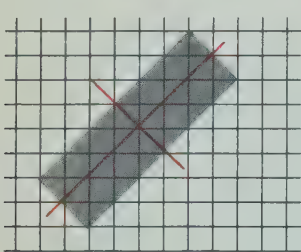
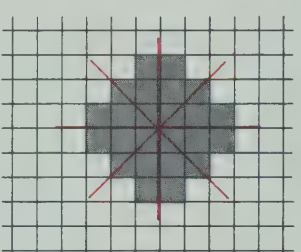
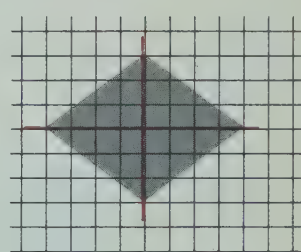
8.



## Flip Lines and Lines of Symmetry

Draw the lines of symmetry for each shape.

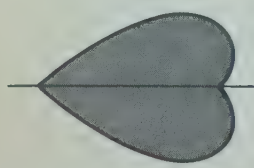
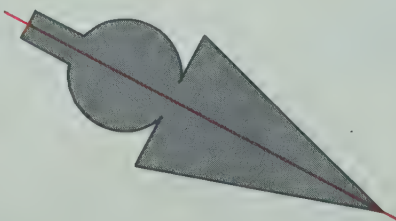
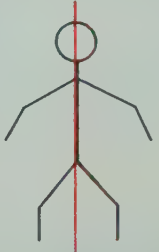

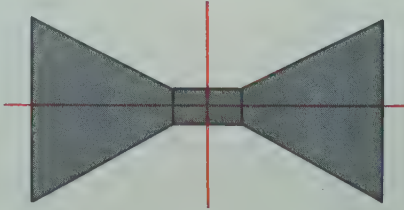

Guess a line of symmetry. Then use tracing paper to check: The part of a figure on one side of a line of symmetry is the flip image of the part on the other side.

<p>1.</p> 	<p>2.</p> 	<p>3.</p> 
<p>4.</p> 	<p>5.</p> 	<p>6.</p> 

## Checking for Symmetry

Draw the lines of symmetry for each shape.

Trace the shape. Then look for a way to fold the tracing paper so that the parts of the shape on each fold match.

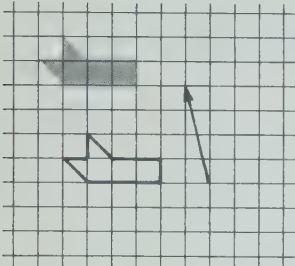
<p>1.</p> 	<p>2.</p> 	<p>3.</p> 
<p>4.</p> 	<p>5.</p> 	<p>6.</p> 



## Practice

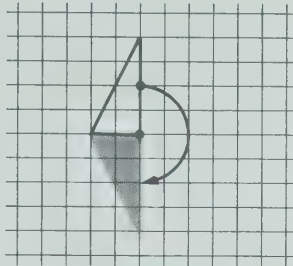
Use tracing paper. Test whether the gray shape is a slide, flip, or turn image of the white shape for the given slide arrow, flip line, or turn arrow.

1.



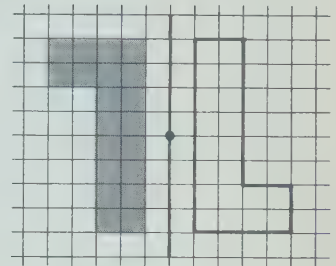
yes (slide)

2.



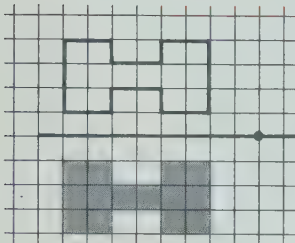
no

3.



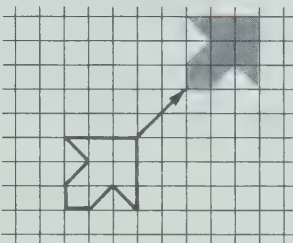
not a flip

4.



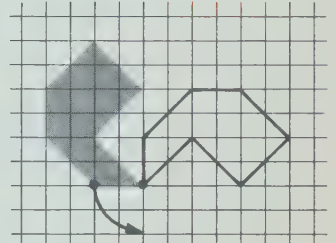
yes

5.



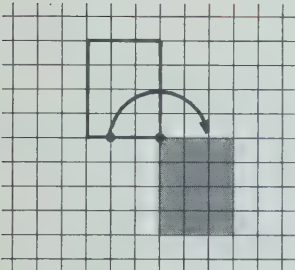
no

6.



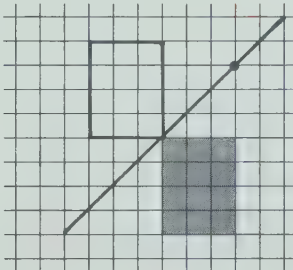
yes

7.



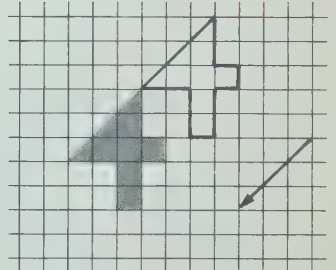
yes

8.



no

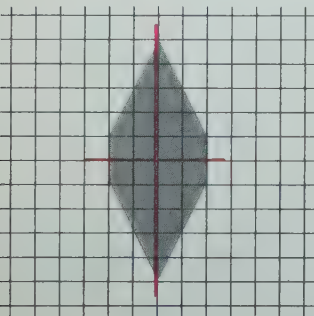
9.



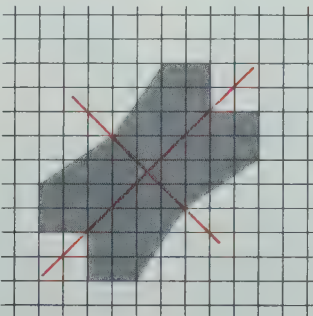
yes

Find the lines of symmetry for each shape.  
Use tracing paper to check.

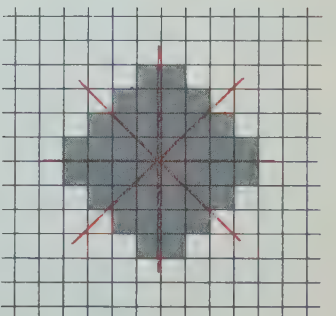
10.



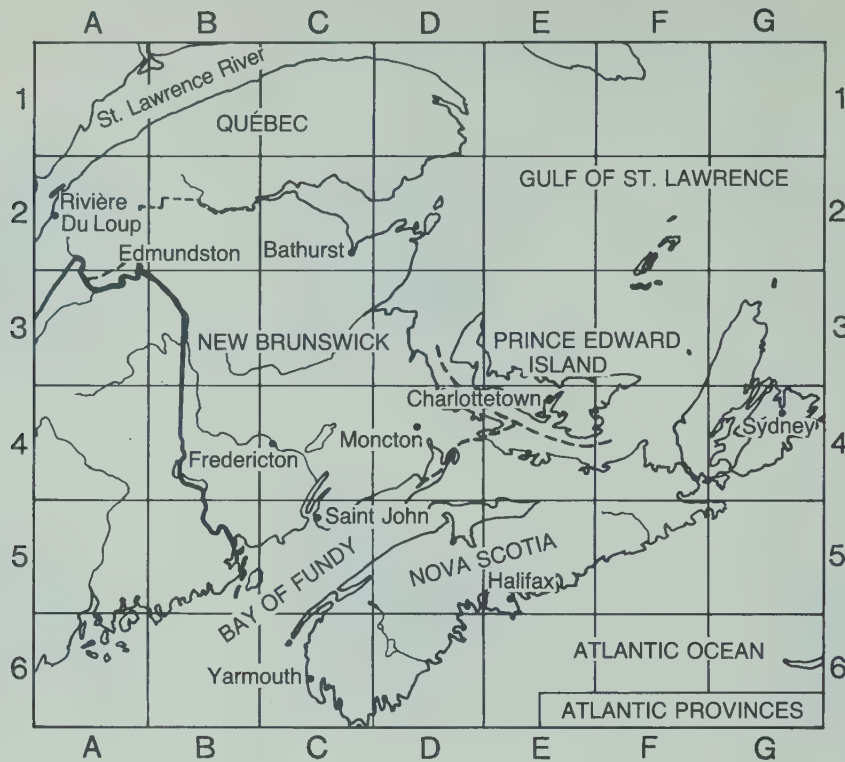
11.



12.



## Places on a Map



Name the region for

1. Charlottetown. (E,4)	2. Yarmouth. (C,6)	3. Sydney. (G,4)
4. Halifax. (E,5)	5. Moncton. (D,4)	6. Bathurst. (C,2)
7. Rivière Du Loup. (A,2)	8. Fredericton. (C,4)	9. Edmundston. (A,2)

Name the regions for

10. the border of Canada and the United States.  
(A,3), (A,2), (B,3), (B,4), (B,5),

12. the Bay of Fundy.  
(B,6), (B,5), (C,6), (C,5), (D,5), (D,4), (E,5)

Name

14. a city in region (C, 5). *Saint John*

16. a province in regions (D, 3), (D, 4), (E, 3), (E, 4), (F, 3), (F, 4).  
*Prince Edward Island*

11. New Brunswick.  
(A, 2), (A, 3), (B, 2), (B, 3), (B, 4), (B, 5)  
(C, 2), (C, 3), (C, 4), (C, 5), (D, 2), (D, 3), (D, 4), (E, 4)

13. the Nova Scotia coastline.  
(C, 5), (C, 6), (D, 4), (D, 5), (D, 6), (E, 4), (E, 5),  
(F, 3), (F, 4), (F, 5), (G, 3), (G, 4), (G, 5)

15. a river in region (B, 1). *St. Lawrence*

17. two provinces that share region (C, 2).  
*Québec, New Brunswick*

## Positions on a Grid

Write a number pair for each point.

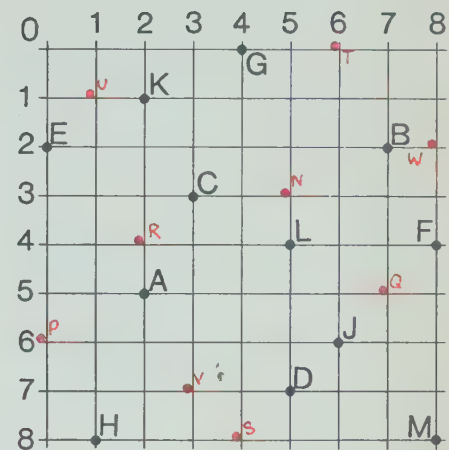
1. A (2,5)	2. B (7,2)	3. C (3,3)
------------	------------	------------

- |             |             |             |
|-------------|-------------|-------------|
| 4. D (5,7)  | 5. E (0,2)  | 6. F (8,4)  |
| 7. G (4,0)  | 8. H (1,8)  | 9. J (6,6)  |
| 10. K (2,1) | 11. L (5,4) | 12. M (8,8) |

On the grid, draw a point for each number pair.

13. N(5, 3)	14. P(0, 6)	15. Q(7, 5)
-------------	-------------	-------------

- |             |             |             |
|-------------|-------------|-------------|
| 16. R(2, 4) | 17. S(4, 8) | 18. T(6, 0) |
| 19. U(1, 1) | 20. V(3, 7) | 21. W(8, 2) |



## Practice

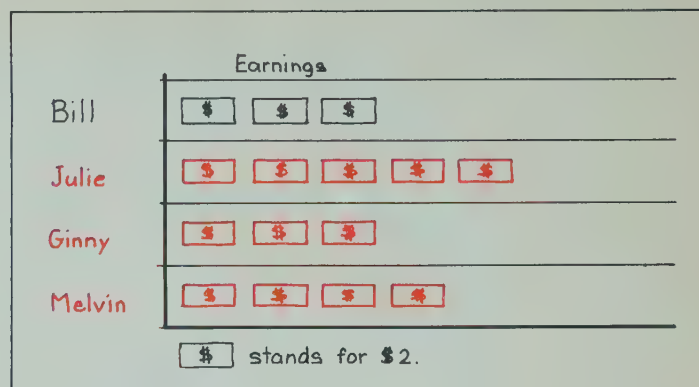
- Sally delivers newspapers to people living in 3 large apartment buildings. She has 78 customers in one building. In the other two she has 56 customers and 68 customers. How many papers does she need? **202**
- The library has 420 books which it plans to display on 7 shelves. All the shelves are to have the same number of books. How many books should be put on each shelf? **60**
- Maria received \$10.00 for her birthday. She bought a puzzle for \$1.89 and a book for \$2.95. How much does she have left? **\$ 5.16**
- 265 students attend Moro School. Each student has agreed to find 3 sponsors for the play. How many sponsors will that be? **795**
- St. Jacques is 415 km away and Rawling is 88 km beyond that. How far away is Rawling? **503 km**
- 2017 people voted in the town election this year. 1926 voted last year. How many more voted this year? **91**



## Drawing Pictographs

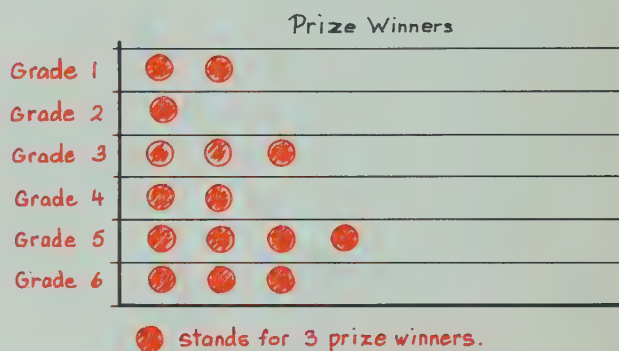
Draw a pictograph for the given information.

	Worker	Earnings
1.	Bill	\$ 6
	Julie	\$10
	Ginny	\$ 6
	Melvin	\$ 8



	Grade	Prize Winners
2.	1	6
	2	3
	3	9
	4	6
	5	12
	6	9

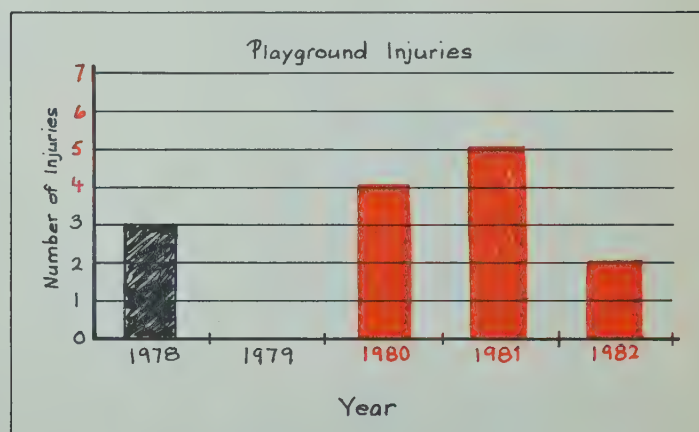
Graphs  
will vary.



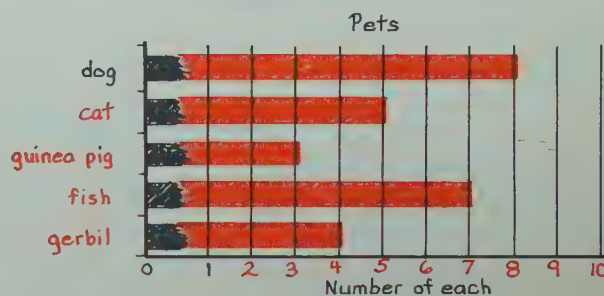
## Drawing Bar Graphs

Draw a bar graph for the given information.

	Year	Playground Injuries
1.	1978	3
	1979	0
	1980	4
	1981	5
	1982	2



	Pet	Number
2.	dog	8
	cat	5
	guinea pig	3
	fish	7
	gerbil	4



## Practice

Perform the indicated operation.

$$\begin{array}{r} 1. \quad \$5.69 \\ + 7.64 \\ \hline \$13.33 \end{array}$$

$$\begin{array}{r} 2. \quad 5210 \\ - 3187 \\ \hline 2023 \end{array}$$

$$\begin{array}{r} 3. \quad 274 \\ \times 7 \\ \hline 1918 \end{array}$$

$$4. \quad \begin{array}{r} 90 \\ 7 \overline{)630} \end{array}$$

$$\begin{array}{r} 5. \quad \$3.71 \\ \times 5 \\ \hline \$18.55 \end{array}$$

$$\begin{array}{r} 6. \quad 7003 \\ - 2138 \\ \hline 4865 \end{array}$$

$$\begin{array}{r} 7. \quad 703 \\ 815 \\ + 362 \\ \hline 1880 \end{array}$$

$$8. \quad \begin{array}{r} 7 \text{ R } 4 \\ 8 \overline{)60} \end{array}$$

$$\begin{array}{r} 9. \quad 415 \\ \times 8 \\ \hline 3320 \end{array}$$

$$\begin{array}{r} 10. \quad 748 \\ - 192 \\ \hline 556 \end{array}$$

$$11. \quad 273 - 186 = 87$$

$$12. \quad 540 \div 9 = 60$$

$$13. \quad 9 \times 57 = 513$$

$$14. \quad 72 \div 8 = 9$$

$$15. \quad 23 + 806 + 94 = 923$$

$$16. \quad 3 \times 2 \times 5 \times 7 = 210$$

$$17. \quad \$4.19 - \$0.37 = \$3.82$$

Solve. Show your work.

18. Tennis balls come 3 to a can. If each can sells for about \$3.95, how much would 6 cans cost?  $\$23.70$

19. Lucy bought a tennis outfit for \$29.95 and a new racket for \$48.50. Together what did these cost?  $\$78.45$

20. It takes 4 people to play "doubles" in tennis. A group of 28 players would require how many courts to play doubles matches all at one time?  $7$

21. The Schroeders paid \$120 for family tennis lessons. Later \$35 was returned for cancelled lessons. What was the final cost?  $\$85$

22. A set in the school tennis tournament may have as few as 6 games and as many as 11. What is the greatest number of games possible for a match of 5 sets?  $55$

23. When the tennis weekend was over, 135 matches had been played on Saturday and 257 had been played on Sunday. How many matches were played on the weekend?  $392$

## Using Decimals to Show Wholes and Tenths

Write the decimal.

1. twelve and four-tenths 12.4    2. two-tenths 0.2    3. six and one-tenth 6.1

Write the words.

4. 4.9 four and nine-tenths    5. 0.4 four-tenths    6. 1.6 one and six-tenths

Write the decimal.

7. nine and seven-tenths 9.7    8. nine-tenths 0.9  
9. five and six-tenths 5.6    10. two and five-tenths 2.5  
11. three-tenths 0.3    12. fourteen and eight-tenths 14.8

Write the words.

13. 3.2 three and two-tenths    14. 0.1 one-tenth    15. 8.8 eight and eight-tenths

## Using Decimals to Show Wholes and Hundredths

Write the decimal.

1. one and eighteen-hundredths 1.18    2. forty-six hundredths 0.46  
3. five-hundredths 0.05    4. ten and two-hundredths 10.02

Write the words.

5. 2.59 two and fifty-nine hundredths    6. 1.06 one and six-hundredths    7. 0.25 twenty-five hundredths

Write the decimal.

8. six and seventy-nine hundredths 6.79    9. one and ten-hundredths 1.10  
10. two-hundredths 0.02    11. four and sixteen-hundredths 4.16  
12. two and seven-hundredths 2.07    13. fifty-five hundredths 0.55

Write the words.

14. 3.18 three and eighteen-hundredths    15. 0.92 ninety-two hundredths    16. 5.01 five and one-tenth



## Relating Hundredths and Tenths

Complete the chart.

<u>Using tenths</u>		<u>Using hundredths</u>	
1.	<u>2.1</u> two and one-tenth	<u>2.10</u>	two and ten-hundredths
2.	<u>0.4</u> four-tenths	<u>0.40</u>	forty-hundredths
3.	<u>3.8</u> three and eight-tenths	<u>3.80</u>	three and eighty-hundredths
4.	<u>1.5</u> one and five-tenths	<u>1.50</u>	one and fifty-hundredths
5.	<u>0.2</u> two-tenths	<u>0.20</u>	twenty-hundredths
6.	<u>2.9</u> two and nine-tenths	<u>2.90</u>	two and ninety-hundredths
7.	<u>1.7</u> one and seven-tenths	<u>1.70</u>	one and seventy-hundredths
8.	<u>0.3</u> three-tenths	<u>0.30</u>	thirty-hundredths
9.	<u>4.6</u> four and six-tenths	<u>4.60</u>	four and sixty-hundredths

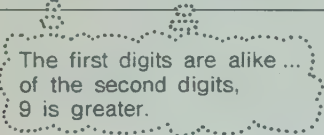
## Decimals and Money

Give the value of each.

<u>dollars   dimes   pennies   value</u>					<u>dollars   dimes   pennies   value</u>				
1.	3	2	16	<u>\$3.36</u>	2.	3	13	1	<u>\$4.31</u>
3.	0	16	8	<u>\$1.68</u>	4.	0	7	17	<u>\$0.87</u>
5.	1	14	4	<u>\$2.44</u>	6.	1	2	12	<u>\$1.32</u>
7.	3	11	5	<u>\$4.15</u>	8.	1	12	14	<u>\$2.34</u>
9.	0	9	10	<u>\$1.00</u>	10.	0	15	11	<u>\$1.61</u>
11.	2	18	10	<u>\$3.90</u>	12.	5	9	19	<u>\$6.09</u>
13.	1	0	5	<u>\$1.05</u>	14.	4	10	10	<u>\$5.10</u>
15.	3	9	12	<u>\$4.02</u>	16.	1	17	18	<u>\$2.88</u>

## Comparing and Ordering Decimals

Which is greater,

1. 1.79 or 1.97? 1.97	2. 3.7 or 2.8? 3.7	3. 0.75 or 0.77? 0.77
		
4. 5.4 or 5.5? 5.5	5. 65.4 or 6.54? 65.4	
6. 0.28 or 0.82? 0.82	7. 2.89 or 2.9? 2.9	

Which is less,

8. 0.06 or 0.6? 0.06      9. 2.9 or 2.10? 2.10      10. 6.5 or 6.07? 6.07

List from least to greatest.

11. 0.01, 1.1, 1.0, 0.1  
0.01, 0.1, 1.0, 1.1
12. 3.3, 3.15, 3.14, 13.1  
3.14, 3.15, 3.3, 13.1
13. 1.02, 1.3, 1.22, 1.20  
1.02, 1.20, 1.22, 1.3

List from greatest to least.

14. 1.8, 1.18, 0.88, 1.81  
1.81, 1.80, 1.18, 0.88
15. 2.07, 2.7, 0.27, 2.77  
2.77, 2.7, 2.07, 0.27
16. 3.26, 32.6, 2.26, 22.6  
32.6, 22.6, 3.26, 2.26

## Adding Decimals

Add.

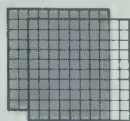
1. $\begin{array}{r} 2.87 \\ 5.43 \\ \hline 8.30 \end{array}$	2. $\begin{array}{r} 2.49 \\ 4.82 \\ \hline 7.31 \end{array}$	3. $\begin{array}{r} 12.19 \\ 53.05 \\ \hline 65.24 \end{array}$	4. 5.62 + 3.18 8.80
---	---	--	---------------------

5. 
$$\begin{array}{r} 3.25 \\ 3.67 \\ \hline 6.92 \end{array}$$
6. 
$$\begin{array}{r} 1.95 \\ 6.44 \\ \hline 8.39 \end{array}$$
7. 
$$\begin{array}{r} 63.5 \\ 24.5 \\ \hline 88.0 \end{array}$$
8. 
$$\begin{array}{r} 7.69 \\ 0.51 \\ \hline 8.20 \end{array}$$
9. 
$$\begin{array}{r} 2.7 \\ 2.6 \\ \hline 5.3 \end{array}$$
10. 
$$\begin{array}{r} 4.87 \\ 0.34 \\ \hline 5.21 \end{array}$$
11. 
$$\begin{array}{r} 4.5 \\ 2.9 \\ \hline 7.4 \end{array}$$
12. 
$$\begin{array}{r} 5.69 \\ 1.49 \\ \hline 7.18 \end{array}$$
13. 
$$\begin{array}{r} 3.84 \\ 6.73 \\ \hline 10.57 \end{array}$$
14. 
$$\begin{array}{r} 1.95 \\ 7.32 \\ \hline 9.27 \end{array}$$
15. 33.67 + 9.87  
43.54
16. 34.1 + 16.8  
50.9
17. 31.78 + 24.42  
56.20

## Practice

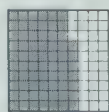
Write a decimal to match each picture.

1.



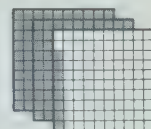
1.8

2.



0.67

3.



2.08

4.



3.5

5.



0.85

Write the decimal.

6. two-tenths 0.2

7. eighty-seven hundredths 0.87

8. one and three-tenths 1.3

9. four and one-hundredth 4.01

Write the words.

10. 0.5 five-tenths

11. 4.26 four and twenty-six hundredths

12. 2.6 two and six-tenths

13. 0.07 seven-hundredths

Write each as a two-place decimal.

14. 6.7 6.70

15. 0.9 0.90

Write each as a one-place decimal.

16. 14.30 14.3

17. 0.10 0.1

Complete.

18. 0.27 shows 2 tenths 7 hundredths, or 27 hundredths.19. 4 dollars 12 dimes are worth \$5.20.20. 1 dollar 4 dimes 18 pennies are worth \$1.58.21. 15 dimes 16 pennies are worth \$1.66.

Which is greater,

22. 1.2 or 1.6?  
1.623. 2.30 or 2.03?  
2.3024. 0.9 or 0.3?  
0.925. 4.20 or 4.22?  
4.22

List from least to greatest.

26. 0.94, 1.49, 0.49, 0.99  
0.49, 0.94, 0.99, 1.49

List from greatest to least.

27. 3.33, 3.63, 0.66, 3.36  
3.63, 3.36, 3.33, 0.66

Add.

$$\begin{array}{r} 1.8 \\ 2.6 \\ \hline 4.4 \end{array}$$

$$\begin{array}{r} 6.36 \\ 1.35 \\ \hline 7.71 \end{array}$$

$$\begin{array}{r} 2.6 \\ 5.4 \\ \hline 8.0 \end{array}$$

$$\begin{array}{r} 2.67 \\ 5.59 \\ \hline 8.26 \end{array}$$

$$\begin{array}{r} 1.83 \\ 0.67 \\ \hline 2.50 \end{array}$$

33.  $8.6 + 0.8$  9.4

34.  $4.84 + 3.17$  8.01

35.  $6.95 + 1.08$  8.03



## Subtracting Decimals

Subtract.

1. $\begin{array}{r} 6.94 \\ - 4.58 \\ \hline 2.36 \end{array}$	2. $\begin{array}{r} 84.5 \\ - 16.9 \\ \hline 67.6 \end{array}$	3. $\begin{array}{r} \$70.00 \\ - 35.81 \\ \hline \$34.19 \end{array}$	4. $8.60 - 7.35 = 1.25$
5. $\begin{array}{r} 7.93 \\ - 5.48 \\ \hline 2.45 \end{array}$	6. $\begin{array}{r} 30.01 \\ - 24.72 \\ \hline 5.29 \end{array}$	7. $\begin{array}{r} \$56.39 \\ - 47.93 \\ \hline \$8.46 \end{array}$	8. $\begin{array}{r} 50.0 \\ - 36.9 \\ \hline 13.1 \end{array}$
9. $\begin{array}{r} 84.96 \\ - 36.38 \\ \hline 48.58 \end{array}$	10. $\begin{array}{r} \$80.64 \\ - 63.59 \\ \hline \$17.05 \end{array}$	11. $\begin{array}{r} 9.64 \\ - 2.93 \\ \hline 6.71 \end{array}$	12. $\begin{array}{r} 70.50 \\ - 61.56 \\ \hline 8.94 \end{array}$
13. $\begin{array}{r} 7.3 \\ - 5.7 \\ \hline 1.6 \end{array}$	14. $\begin{array}{r} 43.61 \\ - 25.68 \\ \hline 17.93 \end{array}$	15. $10.2 - 6.4 = 3.8$	16. $\$10.15 - \$2.51 = \$7.64$
17. $3.81 - 1.44 = 2.37$			

## Multiplying Decimal Tenths and Whole Numbers

Multiply.

1. $\begin{array}{r} 0.8 \\ \times 4 \\ \hline 3.2 \end{array}$ <small>4 x 8 tenths = 32 tenths</small>	2. $\begin{array}{r} 0.7 \\ \times 5 \\ \hline 3.5 \end{array}$ <small>5 x 7 tenths = 35 tenths</small>	3. $\begin{array}{r} 0.6 \\ \times 3 \\ \hline 1.8 \end{array}$	4. $6 \times 0.5 = 3.0$
5. $\begin{array}{r} 0.5 \\ \times 3 \\ \hline 1.5 \end{array}$	6. $\begin{array}{r} 0.4 \\ \times 9 \\ \hline 3.6 \end{array}$	7. $\begin{array}{r} 0.4 \\ \times 7 \\ \hline 2.8 \end{array}$	8. $\begin{array}{r} 0.8 \\ \times 5 \\ \hline 4.0 \end{array}$
9. $\begin{array}{r} 0.8 \\ \times 2 \\ \hline 1.6 \end{array}$	10. $\begin{array}{r} 0.4 \\ \times 4 \\ \hline 1.6 \end{array}$	11. $\begin{array}{r} 0.7 \\ \times 9 \\ \hline 6.3 \end{array}$	12. $\begin{array}{r} 0.8 \\ \times 8 \\ \hline 6.4 \end{array}$
13. $\begin{array}{r} 0.6 \\ \times 6 \\ \hline 3.6 \end{array}$	14. $\begin{array}{r} 0.5 \\ \times 2 \\ \hline 1.0 \end{array}$	15. $3 \times 0.9 = 2.7$	16. $7 \times 0.2 = 1.4$
17. $9 \times 0.8 = 7.2$	18. $8 \times 0.3 = 2.4$		

## Multiplying One-Place Decimals

Multiply.

1. $\begin{array}{r} 3.7 \\ \times 4 \\ \hline 14.8 \end{array}$	2. $\begin{array}{r} 4.6 \\ \times 2 \\ \hline 9.2 \end{array}$	3. $\begin{array}{r} 5.7 \\ \times 3 \\ \hline 17.1 \end{array}$	4. $2.3 \times 7 = 16.1$
--	---	--	--------------------------

5. $\begin{array}{r} 2.9 \\ \times 6 \\ \hline 17.4 \end{array}$	6. $\begin{array}{r} 4.6 \\ \times 4 \\ \hline 18.4 \end{array}$	7. $\begin{array}{r} 9.3 \\ \times 8 \\ \hline 74.4 \end{array}$	8. $\begin{array}{r} 5.1 \\ \times 9 \\ \hline 45.9 \end{array}$	9. $\begin{array}{r} 7.6 \\ \times 5 \\ \hline 38.0 \end{array}$
10. $\begin{array}{r} 4.8 \\ \times 7 \\ \hline 33.6 \end{array}$	11. $\begin{array}{r} 7.5 \\ \times 7 \\ \hline 52.5 \end{array}$	12. $\begin{array}{r} 9.7 \\ \times 9 \\ \hline 87.3 \end{array}$	13. $\begin{array}{r} 6.2 \\ \times 3 \\ \hline 18.6 \end{array}$	14. $\begin{array}{r} 5.7 \\ \times 8 \\ \hline 45.6 \end{array}$

15.  $5 \times 1.2 = 6.0$       16.  $6 \times 3.6 = 21.6$       17.  $4 \times 9.2 = 36.8$

18.  $6 \times 8.4 = 50.4$       19.  $9 \times 3.8 = 34.2$       20.  $5 \times 4.9 = 24.5$

## Rounding Decimal Tenths to Whole Numbers

Round to the nearest whole number.

1. 3.2 → 3	2. 6.8 → 7	3. 4.5 → 5	4. 9.9 → 10	5. 2.6 → 3
6. 7.1 → 7	7. 5.6 → 6	8. 0.9 → 1	9. 3.7 → 4	10. 1.1 → 1
11. 6.2 → 6	12. 8.8 → 9	13. 5.9 → 6	14. 8.5 → 9	15. 14.2 → 14
16. 12.9 → 13	17. 0.5 → 1	18. 9.7 → 10	19. 8.6 → 9	20. 0.7 → 1

Round each to the nearest whole number of litres, kilometres, or kilograms.

21. 7.3 km → 7 km	22. 1.5 L → 2 L	23. 3.4 kg → 3 kg	24. 2.8 L → 3 L
25. 4.9 km → 5 km	26. 6.4 L → 6 L	27. 5.1 kg → 5 kg	28. 4.3 L → 4 L
29. 9.5 km → 10 km	30. 7.6 kg → 8 kg	31. 0.8 km → 1 km	32. 8.2 kg → 8 kg

## Rounding Addends to Estimate the Sum

Round each addend to the nearest whole number.  
Then add to estimate the sum.

1. $\begin{array}{r} 3.6 \\ 4.1 \\ \hline \end{array}$ 4 8	2. $\begin{array}{r} 1.7 \\ 8.9 \\ \hline \end{array}$ 2 9 11	3. $\begin{array}{r} 2.3 \\ 7.8 \\ \hline \end{array}$ 10	4. $\begin{array}{r} 6.5 \\ 4.5 \\ \hline \end{array}$ 12
5. $\begin{array}{r} 1.9 \\ 1.1 \\ \hline \end{array}$ 3	6. $\begin{array}{r} 6.5 \\ 7.8 \\ \hline \end{array}$ 15	7. $\begin{array}{r} 1.0 \\ 9.9 \\ \hline \end{array}$ 11	8. $\begin{array}{r} 5.4 \\ 8.7 \\ \hline \end{array}$ 14
9. $\begin{array}{r} 1.2 \\ 3.2 \\ 9.8 \\ \hline \end{array}$ 14	10. $\begin{array}{r} 6.3 \\ 1.3 \\ 3.5 \\ \hline \end{array}$ 11	11. $\begin{array}{r} 8.7 \\ 2.3 \\ 2.9 \\ \hline \end{array}$ 14	12. $\begin{array}{r} 4.6 \\ 2.4 \\ 3.3 \\ \hline \end{array}$ 10
13. $4.6 + 4.7$ 10	14. $5.6 + 2.1$ 8	15. $1.3 + 8.9 + 2.7$ 13	

## Rounding Factors to Estimate the Product

Round to the nearest whole number.  
Then multiply to estimate the product.

1. $\begin{array}{r} 2.1 \\ 3 \\ \hline \end{array}$ 2 6	2. $\begin{array}{r} 7.8 \\ 8 \\ \hline \end{array}$ 8 8 64	3. $\begin{array}{r} 5.6 \\ 5 \\ \hline \end{array}$ 30	4. $\begin{array}{r} 3.4 \\ 6 \\ \hline \end{array}$ 24
5. $\begin{array}{r} 1.6 \\ 8 \\ \hline \end{array}$ 16	6. $\begin{array}{r} 6.7 \\ 3 \\ \hline \end{array}$ 21	7. $\begin{array}{r} 9.1 \\ 2 \\ \hline \end{array}$ 18	8. $\begin{array}{r} 4.3 \\ 4 \\ \hline \end{array}$ 16
9. $\begin{array}{r} 5.9 \\ 6 \\ \hline \end{array}$ 36	10. $\begin{array}{r} 19.9 \\ 3 \\ \hline \end{array}$ 60	11. $\begin{array}{r} 4.5 \\ 7 \\ \hline \end{array}$ 35	12. $\begin{array}{r} 13.8 \\ 4 \\ \hline \end{array}$ 56
13. $\begin{array}{r} 32.3 \\ 5 \\ \hline \end{array}$ 160	14. $\begin{array}{r} 6.5 \\ 2 \\ \hline \end{array}$ 14	15. $\begin{array}{r} 15.2 \\ 4 \\ \hline \end{array}$ 60	16. $\begin{array}{r} 26.7 \\ 7 \\ \hline \end{array}$ 189



**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 849 \\ 103 \\ + 224 \\ \hline 1176 \end{array}$$

$$\begin{array}{r} 2. \quad 183 \\ \times 5 \\ \hline 915 \end{array}$$

$$\begin{array}{r} 3. \quad 1102 \\ - 526 \\ \hline 576 \end{array}$$

$$4. \quad \overset{60}{7 \overline{)420}}$$

$$\begin{array}{r} 5. \quad 6.3 \\ + 7.8 \\ \hline 14.1 \end{array}$$

$$\begin{array}{r} 6. \quad 7.3 \\ \times 4 \\ \hline 29.2 \end{array}$$

$$\begin{array}{r} 7. \quad \$8.17 \\ - 3.52 \\ \hline \$4.65 \end{array}$$

$$\begin{array}{r} 8. \quad 2.71 \\ + 6.38 \\ \hline 9.09 \end{array}$$

$$\begin{array}{r} 9. \quad 68 \\ \times 7 \\ \hline 476 \end{array}$$

$$\begin{array}{r} 10. \quad 8.0 \\ - 2.4 \\ \hline 5.6 \end{array}$$

$$11. \quad 120 \div 4 \\ 30$$

$$12. \quad 6 \times 4.7 \\ 28.2$$

$$13. \quad 9.31 - 5.47 \\ 3.84$$

$$14. \quad \$8.61 + \$5.08 \\ \$13.69$$

$$15. \quad 7 \times 0.8 \\ 5.6$$

$$16. \quad 3 \times 5 \times 7 \times 2 \\ 210$$

Solve. Show your work.

17. The mower can hold 2.3 L of fuel in its tank. Right now it has 0.5 L. How much fuel is needed to fill the tank?  $1.8 \text{ L}$

18. One lap on the track is 0.6 km. Kevin runs 6 laps. How far has he run?  $3.6 \text{ km}$

19. The road to York is 120 km long. The painting crew plans to paint the centre lines in 4 equal sections, with each crew member changing jobs for each section. How long will each section be?  $30 \text{ km}$

20. Paint for the fence cost \$18.46. The painter charged \$40 plus \$2.75 for other expenses. How much did it cost to paint the fence?  $\$61.21$

21. The auditorium holds 435 people. The school filled it for all 3 performances of the play. How many people attended?  $1305$

22. The land surveyor says the curved path to town is 3.14 km and the straight path is 2.87 km. How much longer is the curved path?  $0.27 \text{ km}$

NAME \_\_\_\_\_

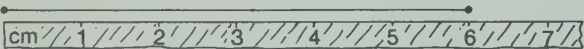



SPM4/U9/204-205

## Measuring and Estimating in Centimetres

Use a centimetre ruler. Estimate first. Then measure the length to the nearest centimetre.

*Estimates will vary.*

Read the ruler.

1. 	Estimate <u>5 cm</u>	Measurement <u>6 cm</u>
2. 	Est. _____	Meas. <u>9 cm</u>
3. 	Est. _____	Meas. <u>7 cm</u>
4. 	Est. _____	Meas. <u>10 cm</u>

*Estimates and measurements will vary for Exercises 5-10.*

5. your pencil	6. your thumb	7. your shoe
Est. _____ Meas. _____	Est. _____ Meas. _____	Est. _____ Meas. _____
8. the width of your hand	9. the width of your ruler	10. the height of your ankle
Est. _____ Meas. _____	Est. _____ Meas. _____	Est. _____ Meas. _____

SPM4/U9/206

## Decimetres, Centimetres, and Decimals

Complete.

1. 5 cm = <u>0.5</u> dm <u>1 cm = 0.1 dm</u>	2. 4 dm = <u>40</u> cm <u>1 dm = 10 cm</u>	3. 15 cm = <u>1.5</u> dm
4. 2.7 dm = <u>27</u> cm	5. 0.9 dm = <u>9</u> cm	6. 11 cm = <u>1.1</u> dm
7. 2 cm = <u>0.2</u> dm	8. 2.3 dm = <u>23</u> cm	9. 3 dm = <u>30</u> cm

Use a ruler. Estimate first. Then measure each.

10. the width of this page	11. the length of this page
Estimate: _____ dm or _____ cm	Estimate: _____ dm or _____ cm
Measurement: <u>2.1</u> dm or <u>21</u> cm	Measurement: <u>2.8</u> dm or <u>28</u> cm
12. the height of your knee	13. the length from elbow to fingertip
Estimate: _____ dm or _____ cm	Estimate: _____ dm or _____ cm
Measurement: _____ dm or _____ cm	Measurement: _____ dm or _____ cm

*Estimates and measurements will vary for Exercises 12 and 13.*

## Metres, Centimetres, and Decimals

Complete.

1. 135 cm = <u>1.35</u> m <u>100 cm = 1 m</u>	2. 0.68 m = <u>68</u> cm <u>0.01 m = 1 cm</u>
3. 89 cm = <u>0.89</u> m	4. 1.7 m = <u>170</u> cm
5. 2.07 m = <u>207</u> cm	6. 300 cm = <u>3</u> m
7. 170 cm = <u>1.70</u> m	8. 0.8 m = <u>80</u> cm
9. 3 m = <u>300</u> cm	10. 55 cm = <u>0.55</u> m

Measure each in centimetres. Then give each length in metres. Answers for 11, 13, 14 will vary.

- |  |   |
|--|---|
| 11. your height                                  | 12. the classroom door                          |
| 13. how far you can step                         | 14. how far you can hop                         |
| 15. from the floor to the base of the chalkboard | 16. from the floor to the top of the chalkboard |

## Metres, Decimetres, Centimetres, and Decimals

Complete.

1. 115 cm = <u>11.5</u> dm or <u>1.15</u> m	2. 72 dm = <u>720</u> cm or <u>7.2</u> m
3. 3.2 m = <u>320</u> cm or <u>32</u> dm	4. 85 cm = <u>8.5</u> dm or <u>0.85</u> m
5. 4.7 dm = <u>47</u> cm or <u>0.47</u> m	6. 7 m = <u>700</u> cm or <u>70</u> dm
7. 150 cm = <u>15</u> dm or <u>1.5</u> m	8. 12.6 dm = <u>126</u> cm or <u>1.26</u> m
9. 0.62 m = <u>62</u> cm or <u>6.2</u> dm	10. 8 dm = <u>80</u> cm or <u>0.80</u> m
11. 0.4 m = <u>40</u> cm or <u>4</u> dm	12. 70 cm = <u>7</u> dm or <u>0.7</u> m
13. 4.3 m = <u>430</u> cm or <u>43</u> dm	14. 200 cm = <u>20</u> dm or <u>2</u> m
15. 5.7 dm = <u>57</u> cm or <u>0.57</u> m	16. 50 dm = <u>500</u> cm or <u>5</u> m
17. 125 cm = <u>12.5</u> dm or <u>1.25</u> m	18. 2 m = <u>200</u> cm or <u>20</u> dm



## Kilometres and Metres

Complete.

1. 3000 m = <u>3</u> km <small>1000 m = 1 km</small>	2. 4.2 km = <u>4200</u> m
3. 8 km = <u>8000</u> m	4. 1700 m = <u>1.7</u> km
5. 980 m = <u>0.98</u> km	6. 3.7 km = <u>3700</u> m
7. 5070 m = <u>5.07</u> km	8. 0.6 km = <u>600</u> m
9. 2.12 km = <u>2120</u> m	10. 100 m = <u>0.1</u> km
11. 3200 m = <u>3.2</u> km	12. 0.8 km = <u>800</u> m

How many kilometres is it?

13. Joe climbed to 12 000 m. 12

14. Sheila ran 3500 m. 3.5

How many metres is it?

15. We hiked 4.6 km. 4600

16. The parachutist fell 1.25 km. 1250

## Choosing a Unit of Length

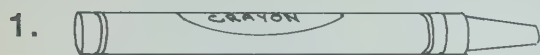
Which unit, the kilometre, the metre, or the centimetre, would you use to measure each of these?

1. length of a tennis court <u>metre</u>	2. diameter of a hockey puck <u>centimetre</u>	3. height of a house <u>metre</u>
4. length of a highway <u>kilometre</u>	5. length of a hallway <u>metre</u>	6. length of a shoelace <u>centimetre</u>
7. height of your ankle <u>centimetre</u>	8. height of an airplane <u>metre</u> (kilometre may be acceptable.)	9. height of a space satellite <u>kilometre</u> (metre may be acceptable)
10. distance to the next town <u>kilometre</u>	11. distance to the drinking fountain <u>metre</u>	12. distance from your lip to your chin <u>centimetre</u>
13. distance around your wrist <u>centimetre</u>	14. distance around a soccer field <u>metre</u>	15. distance around the world <u>kilometre</u>

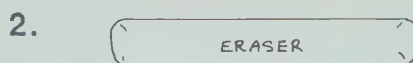
## Practice

Use a centimetre ruler. Estimate first.

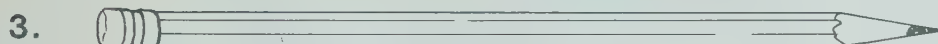
Then measure the length to the nearest centimetre. *Estimates may vary.*



Estimate \_\_\_\_\_ Measurement 6 cm



Est. \_\_\_\_\_ Meas. 4 cm



Est. \_\_\_\_\_ Meas. 11 cm



Est. \_\_\_\_\_ Meas. 14 cm

5. the height of your chair seat

Est. \_\_\_\_\_ Meas. \_\_\_\_\_

6. the width of this book

Est. \_\_\_\_\_ Meas. 21 cm

Complete.

- |                           |                            |                             |
|---------------------------|----------------------------|-----------------------------|
| 7. 70 m = <u>700</u> cm   | 8. 48 cm = <u>4.8</u> dm   | 9. 43 dm = <u>4.3</u> m     |
| 10. 3.5 dm = <u>35</u> cm | 11. 6 m = <u>60</u> dm     | 12. 0.8 km = <u>800</u> m   |
| 13. 70 cm = <u>0.70</u> m | 14. 0.38 m = <u>38</u> cm  | 15. 70 dm = <u>7</u> m      |
| 16. 0.9 dm = <u>9</u> cm  | 17. 3500 m = <u>3.5</u> km | 18. 70 cm = <u>7</u> dm     |
| 19. 1.2 m = <u>120</u> cm | 20. 600 cm = <u>6</u> m    | 21. 800 m = <u>0.8</u> km   |
| 22. 510 cm = <u>5.1</u> m | 23. 0.9 m = <u>9</u> dm    | 24. 70 km = <u>70 000</u> m |

Which unit, the centimetre, the metre, or the kilometre, would be best for measuring each of these?

- |  |   |  |
|--|---|--|
| 25. a gerbil <u>centimetre</u>                   | 26. a row boat <u>metre</u>                   | 27. an airplane trip <u>kilometre</u>        |
| 28. the border of your province <u>kilometre</u> | 29. a wallet <u>centimetre</u>                | 30. a rocket for a space launch <u>metre</u> |
| 31. how far a car travels <u>kilometre</u>       | 32. how far you can throw a ball <u>metre</u> | 33. how high you can reach <u>centimetre</u> |

## Finding the Perimeter

Find the perimeter of each.

<p><b>1.</b></p> <p style="text-align: right;">431 cm</p>	<p><b>2.</b></p> <p style="text-align: right;">8.0 dm</p>	<p><b>3.</b></p> <p style="text-align: right;">9.75 m</p>
<p><b>4.</b></p> <p style="text-align: right;">289 cm</p>	<p><b>5.</b></p> <p style="text-align: right;">52.2 dm</p>	<p><b>6.</b></p> <p style="text-align: right;">15.38 m</p>

SPM4/U9/214-215

## Graphing

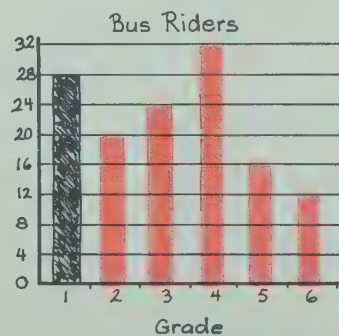
For this information,

Part of the first two have been done for you

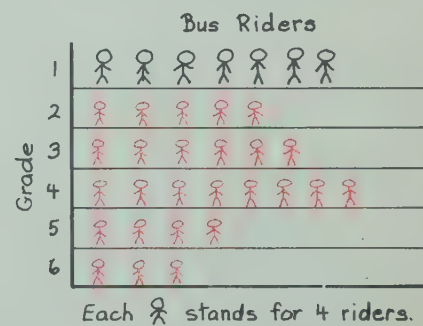
Number of students  
who ride a bus

Grade 1	28
Grade 2	20
Grade 3	24
Grade 4	32
Grade 5	16
Grade 6	12

1. draw a bar graph.



2. draw a pictograph.



Use other paper.

3. Draw a bar graph and a pictograph.

Number of books read *Graphs may vary.*

Grade 1	5
Grade 2	5
Grade 3	10
Grade 4	20
Grade 5	25
Grade 6	30

4. Draw a bar graph and a pictograph.

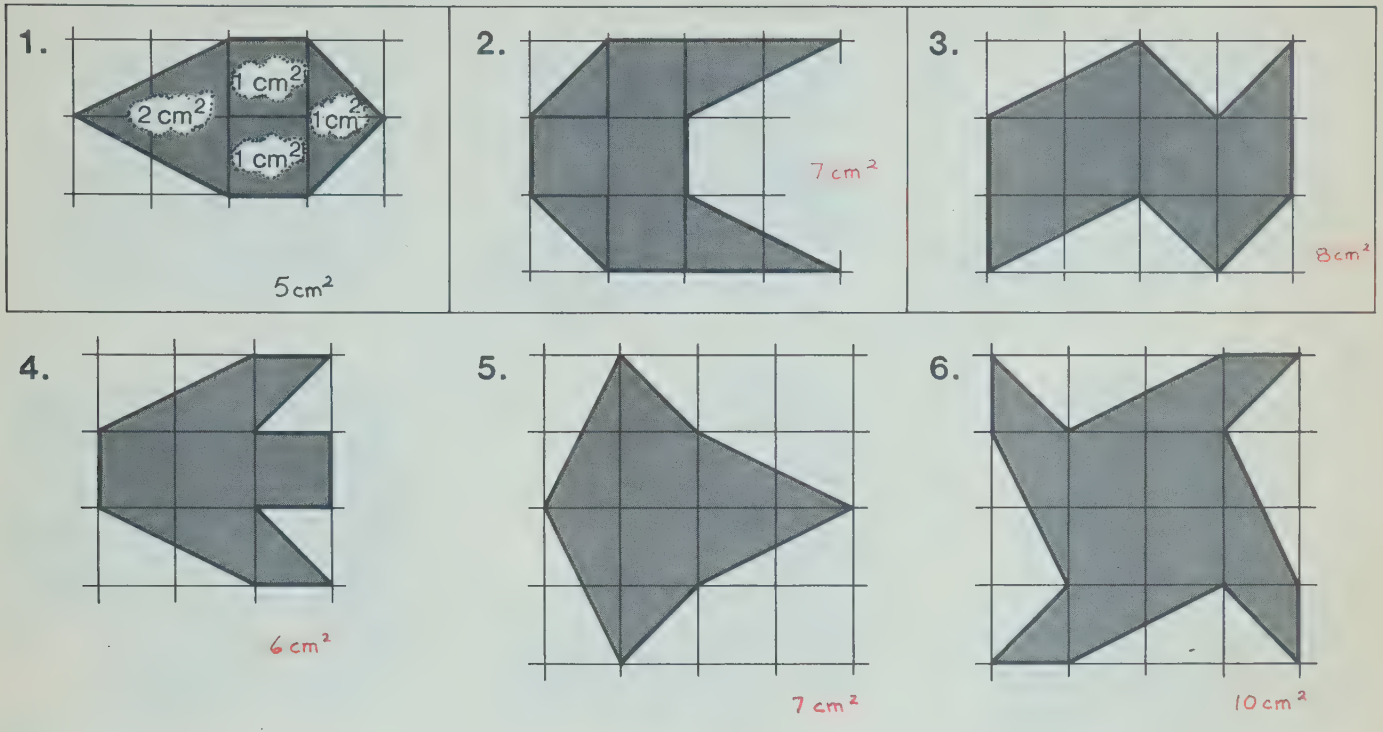
Number in each class *Graphs may vary.*

Grade 1	30
Grade 2	24
Grade 3	30
Grade 4	42
Grade 5	36
Grade 6	30



## Area in Square Centimetres

Give each area in square centimetres.



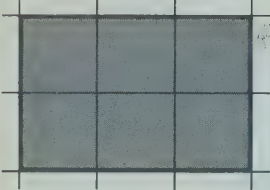

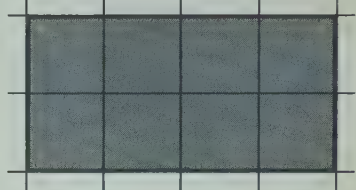
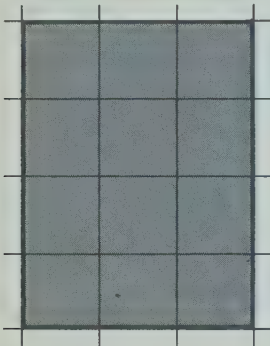

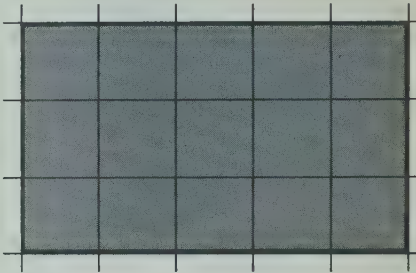
## Practice

Solve. Show your work.

- Many small boats turned out to watch the 3 d of racing. The patrol boat saw there were 115 boats on Friday, 220 on Saturday, and 316 on Sunday.  
How many were there in all? *651*
- The propellar shaft is 3.75 cm in diameter. The hole in the bearing is only 3.17 cm in diameter. How much must the machinist remove from the shaft for it to fit in the bearing? *0.58 cm*
- New cleats for the boat cost \$7.68 each. Five are needed.  
How much will they cost? *\$38.40*
- Ian's father bought a used sail boat for \$3150. He spent \$1280 fixing it up.  
What was his total cost? *\$4430*
- The sailing club lays out a triangular course. The lengths of the parts are 1.7 km, 2.9 km, and 2.3 km.  
What is the distance around the course? *6.9 km*
- T-shirts with the boat club flag cost \$5.85. Each of the 3 Boynton children bought one.  
How much did they spend? *\$17.55*

## Using Multiplication to Find Area

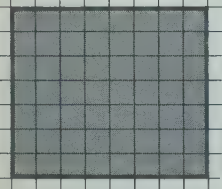
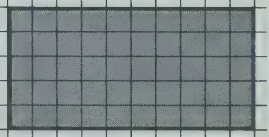
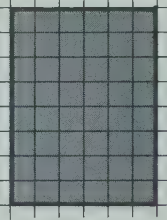
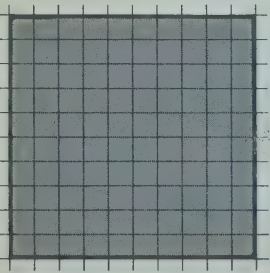
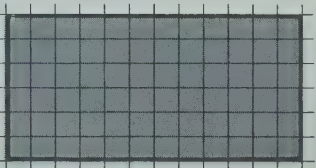
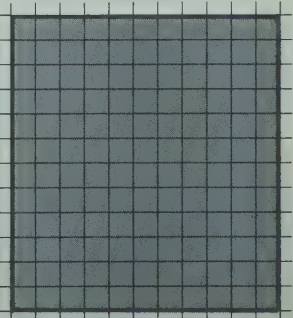
Write two multiplication sentences that give the area of each shape.

<p>1. </p> <p><math>2 \times 3 = 6</math>, <math>3 \times 2 = 6</math>, <math>6 \text{ cm}^2</math></p>	<p>2. </p> <p><math>3 \times 4 = 12</math>, <math>4 \times 3 = 12</math>, <math>12 \text{ cm}^2</math></p>	<p>3. </p> <p><math>2 \times 4 = 8</math>, <math>4 \times 2 = 8</math>, <math>8 \text{ cm}^2</math></p>
<p>4. </p> <p><math>4 \times 3 = 12</math>  <math>3 \times 4 = 12</math>  <math>12 \text{ cm}^2</math></p>	<p>5. </p> <p><math>3 \times 2 = 6</math>, <math>2 \times 3 = 6</math>, <math>6 \text{ cm}^2</math></p>	<p>6. </p> <p><math>3 \times 5 = 15</math>, <math>5 \times 3 = 15</math>, <math>15 \text{ cm}^2</math></p>

SPM4/U9/220

## Area in Square Decimetres and Square Metres

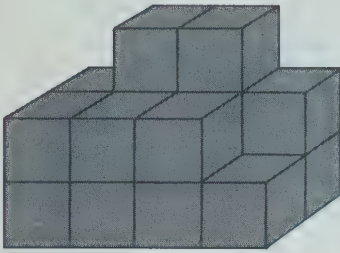
Each square represents  $1 \text{ m}^2$ . What is the area of the shape?

<p>1. </p> <p><math>7 \times 8 = 56</math> <math>56 \text{ m}^2</math></p>	<p>2. </p> <p><math>50 \text{ m}^2</math></p>	<p>3. </p> <p><math>48 \text{ m}^2</math></p>
<p>4. </p> <p><math>100 \text{ m}^2</math></p>	<p>5. </p> <p><math>72 \text{ m}^2</math></p>	<p>6. </p> <p><math>132 \text{ m}^2</math></p>

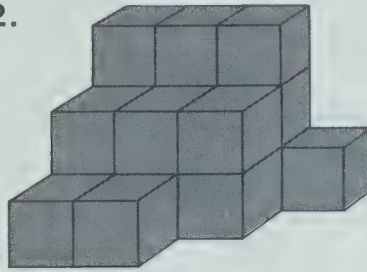
## Volume in Cubic Centimetres

Find the volume in cubic centimetres.

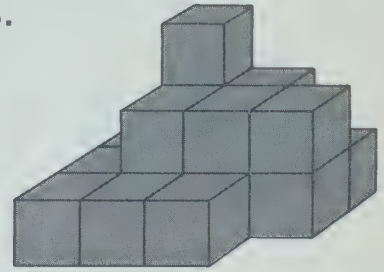
1.


 $17 \text{ cm}^3$ 

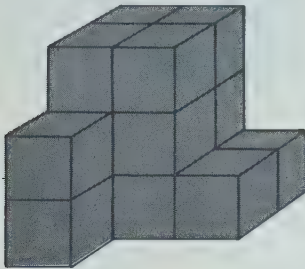
2.


 $18 \text{ cm}^3$ 

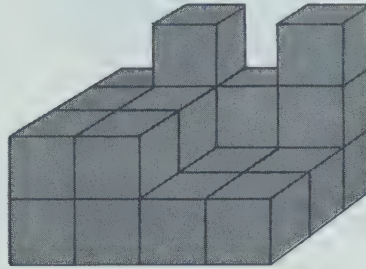
3.


 $17 \text{ cm}^3$ 

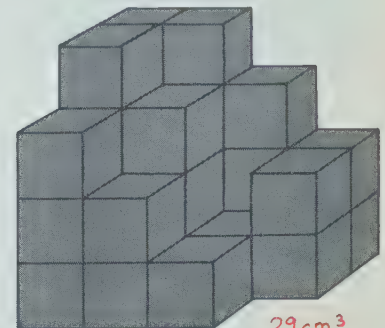
4.


 $16 \text{ cm}^3$ 

5.


 $22 \text{ cm}^3$ 

6.


 $29 \text{ cm}^3$ 

## Practice

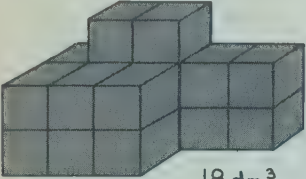
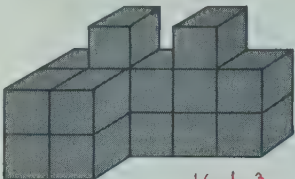
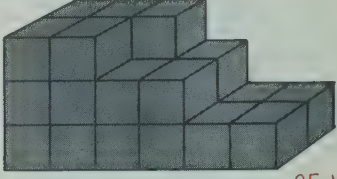
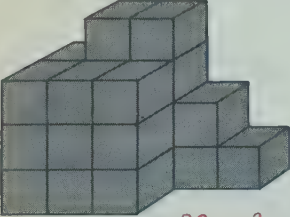
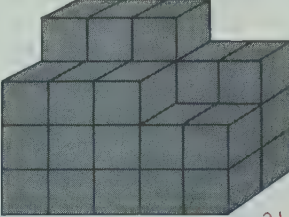
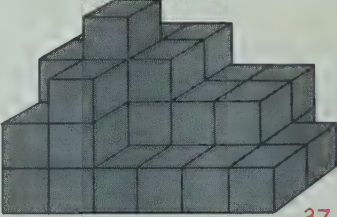
Solve. Show your work.

- The truck had a mass of 2150 kg when empty, and 3278 kg when fully loaded. How heavy was the load?  $1128 \text{ kg}$
- What is the perimeter of the Johnson's terrace, if two of the sides are 8.3 m and the other two are 5.9 m?  $28.4 \text{ m}$
- Ray's kitten is seven months old today. Four of the months had 31 d. Three had 30 d. How many days old is the kitten?  $214$
- At a special sale, each tape cassette cost \$3.39. Tequi bought three. Lola bought two. Together, what did they pay?  $\$16.95$
- The forester has 210 trees to set out in 7 long rows. How many trees should go in each row?  $30$
- A carton contains 3 boxes. Each box contains 6 tins. Each tin contains 8 cookies. How many cookies are in the carton?  $144$



## Volume in Cubic Decimetres

Each little cube represents  $1 \text{ dm}^3$ .  
Find the volume of each solid.

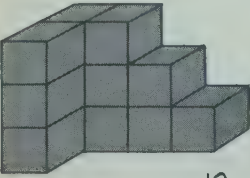
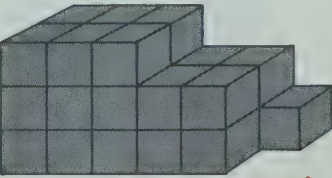
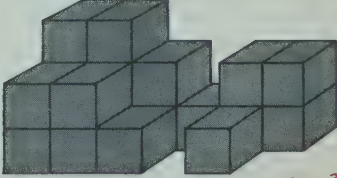
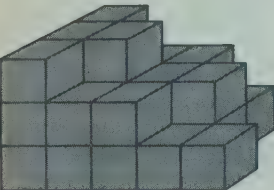
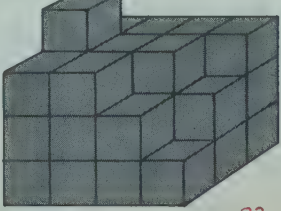
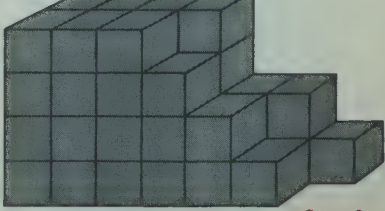
1.  $18 \text{ dm}^3$	2.  $16 \text{ dm}^3$	3.  $25 \text{ dm}^3$
4.  $23 \text{ dm}^3$	5.  $31 \text{ dm}^3$	6.  $37 \text{ dm}^3$

Is it smaller or larger than a cubic decimetre?

- |                                   |                                      |                                |
|-----------------------------------|--------------------------------------|--------------------------------|
| 7. a soccer ball<br><i>larger</i> | 8. a Rubik's Cube™<br><i>smaller</i> | 9. a shoe box<br><i>larger</i> |
|-----------------------------------|--------------------------------------|--------------------------------|

## Volume in Cubic Metres

Each little cube represents  $1 \text{ m}^3$ .  
Find the volume of each solid.

1.  $12 \text{ m}^3$	2.  $27 \text{ m}^3$	3.  $19 \text{ m}^3$
4.  $27 \text{ m}^3$	5.  $33 \text{ m}^3$	6.  $39 \text{ m}^3$

Is it smaller or larger than a cubic metre?

- |                               |                                    |                                   |
|-------------------------------|------------------------------------|-----------------------------------|
| 7. your kitchen <i>larger</i> | 8. the kitchen oven <i>smaller</i> | 9. the refrigerator <i>larger</i> |
|-------------------------------|------------------------------------|-----------------------------------|

**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 816 \\ 273 \\ + 549 \\ \hline 1638 \end{array}$$

$$\begin{array}{r} 2. \quad 7.61 \\ - 3.72 \\ \hline 3.89 \end{array}$$

$$\begin{array}{r} 3. \quad 637 \\ \times 3 \\ \hline 1911 \end{array}$$

$$4. \quad \overset{70}{6 \overline{)420}}$$

$$\begin{array}{r} 5. \quad \$9.02 \\ - 3.65 \\ \hline \$5.37 \end{array}$$

$$\begin{array}{r} 6. \quad 0.8 \\ \times 6 \\ \hline 4.8 \end{array}$$

$$7. \quad \overset{6}{9 \overline{)54}}$$

$$\begin{array}{r} 8. \quad \$7.35 \\ \times 4 \\ \hline \$29.40 \end{array}$$

$$\begin{array}{r} 9. \quad 6.19 \\ + 7.33 \\ \hline 13.52 \end{array}$$

$$\begin{array}{r} 10. \quad 2002 \\ - 714 \\ \hline 1288 \end{array}$$

$$11. \quad 7 \times (46 + 31) \\ 539$$

$$12. \quad 3 \times 8 \times 9 \\ 216$$

$$13. \quad 6.80 - 4.17 \\ 2.63$$

$$14. \quad 640 \div 8 \\ 80$$

$$15. \quad 63 + 2140 + 832 \\ 3035$$

$$16. \quad 8 \times 4.2 \\ 33.6$$

Solve. Show your work.

17. The quilt was made by sewing 5 rows of squares with 8 squares in each row. How many squares were used in the quilt? **40**

18. The 4 Maguire sisters agree to share equally the 280 newspapers they have to deliver. How many will each have? **70**

19. When Sian chose from the menu, she picked an appetizer for \$1.25. Her main course cost \$4.85. Her dessert cost \$1.10. What was the price of her meal? **\$7.20**

20. Nigel began the day with \$7.35. By noon he had spent \$2.80 on food. During the afternoon he spent \$1.54 for magazines. How much did he have at the end of the day? **\$3.01**

21. A shelf had to hold 8 boxes of about 3.5 kg each. How many kilograms did the shelf have to hold? **28 kg**

22. The sides of the garden measure 17 m, 41 m, 18 m, and 30 m. What is the perimeter? **106 m**

## Multiplying Two-Digit Numbers

Multiply.

$$\begin{array}{r} 1. \quad \overset{3}{37} \\ \quad \underline{5} \\ 185 \end{array}$$

$$\begin{array}{r} 2. \quad \overset{3}{69} \\ \quad \underline{4} \\ 276 \end{array}$$

$$\begin{array}{r} 3. \quad \overset{3}{82} \\ \quad \underline{6} \\ 492 \end{array}$$

$$\begin{array}{r} 4. \quad 57 \times 3 \\ \quad \underline{171} \end{array}$$

$$\begin{array}{r} 5. \quad \overset{3}{38} \\ \quad \underline{3} \\ 114 \end{array}$$

$$\begin{array}{r} 6. \quad \overset{3}{94} \\ \quad \underline{5} \\ 470 \end{array}$$

$$\begin{array}{r} 7. \quad \overset{3}{27} \\ \quad \underline{4} \\ 108 \end{array}$$

$$\begin{array}{r} 8. \quad \overset{3}{85} \\ \quad \underline{7} \\ 595 \end{array}$$

$$\begin{array}{r} 9. \quad \overset{3}{91} \\ \quad \underline{8} \\ 728 \end{array}$$

$$\begin{array}{r} 10. \quad \overset{3}{52} \\ \quad \underline{5} \\ 260 \end{array}$$

$$\begin{array}{r} 11. \quad \overset{3}{40} \\ \quad \underline{4} \\ 160 \end{array}$$

$$\begin{array}{r} 12. \quad \overset{3}{93} \\ \quad \underline{9} \\ 837 \end{array}$$

$$\begin{array}{r} 13. \quad \overset{3}{67} \\ \quad \underline{2} \\ 134 \end{array}$$

$$\begin{array}{r} 14. \quad \overset{3}{42} \\ \quad \underline{3} \\ 126 \end{array}$$

$$\begin{array}{r} 15. \quad 8 \times 28 \\ \quad \underline{224} \end{array}$$

$$\begin{array}{r} 16. \quad 6 \times 17 \\ \quad \underline{102} \end{array}$$

$$\begin{array}{r} 17. \quad 9 \times 74 \\ \quad \underline{666} \end{array}$$

## Practice

Solve. Show your work.

1. Rolf won the race in 12.8 s.  
Jorge was 1.3 s slower.  
How long did it take Jorge  
to run the race? *14.1 s*

2. I can get 25 pennies  
for one quarter.  
How many pennies  
can I get for 7 quarters? *175*

3. Sylvia bought 5 packages  
of hamburger. The labels  
showed that each package  
held 1.6 kg. How much  
hamburger did Sylvia buy? *8 kg*

4. The show costs \$4.25  
for mom and \$1.75 for me.  
How much do we need  
so that we can go to the show? *\$6.00*

5. Hart thought he had written  
about 3 paragraphs on each  
page, 6 pages for each  
chapter, and 12 chapters  
for the book. About how  
many paragraphs would  
this be for the book? *216*

6. How many eggs  
are there in 9 dozen? *108*



## Multiplying Three-Digit Numbers

Multiply.

1. $\begin{array}{r} 689 \\ \times 3 \\ \hline 2067 \end{array}$	2. $\begin{array}{r} 471 \\ \times 4 \\ \hline 1884 \end{array}$	3. $\begin{array}{r} 459 \\ \times 2 \\ \hline 918 \end{array}$	4. $\begin{array}{r} 405 \\ \times 7 \\ \hline 2835 \end{array}$	5. $\begin{array}{r} 356 \\ \times 5 \\ \hline 1780 \end{array}$
6. $\begin{array}{r} 835 \\ \times 4 \\ \hline 3340 \end{array}$	7. $\begin{array}{r} 703 \\ \times 3 \\ \hline 2109 \end{array}$	8. $\begin{array}{r} 593 \\ \times 8 \\ \hline 4744 \end{array}$	9. $\begin{array}{r} 610 \\ \times 6 \\ \hline 3660 \end{array}$	10. $\begin{array}{r} 176 \\ \times 9 \\ \hline 1584 \end{array}$
11. $\begin{array}{r} 527 \\ \times 6 \\ \hline 3162 \end{array}$	12. $\begin{array}{r} 719 \\ \times 7 \\ \hline 5033 \end{array}$	13. $\begin{array}{r} 296 \\ \times 4 \\ \hline 1184 \end{array}$	14. $\begin{array}{r} 384 \\ \times 9 \\ \hline 3456 \end{array}$	15. $\begin{array}{r} 209 \\ \times 5 \\ \hline 1045 \end{array}$
16. $\begin{array}{r} 274 \\ \times 8 \\ \hline 2192 \end{array}$	17. $\begin{array}{r} 145 \\ \times 3 \\ \hline 435 \end{array}$	18. $\begin{array}{r} 687 \\ \times 2 \\ \hline 1374 \end{array}$	19. $\begin{array}{r} 823 \\ \times 7 \\ \hline 5761 \end{array}$	20. $\begin{array}{r} 349 \\ \times 6 \\ \hline 2094 \end{array}$

## Estimating Products

Round the two-digit factors to the nearest ten.  
Round the three-digit factors to the nearest hundred.  
Then multiply to estimate each product.

1. $\begin{array}{r} 78 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 80 \\ \times 4 \\ \hline 320 \end{array}$	2. $\begin{array}{r} 284 \\ \times 6 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 6 \\ \hline 1800 \end{array}$	3. $\begin{array}{r} 57 \\ \times 2 \\ \hline \end{array}$ 120	4. $\begin{array}{r} 479 \\ \times 5 \\ \hline \end{array}$ 2500
5. $\begin{array}{r} 37 \\ \times 9 \\ \hline \end{array}$ 360	6. $\begin{array}{r} 28 \\ \times 3 \\ \hline \end{array}$ 90	7. $\begin{array}{r} 93 \\ \times 4 \\ \hline \end{array}$ 360	8. $\begin{array}{r} 55 \\ \times 7 \\ \hline \end{array}$ 420
9. $\begin{array}{r} 467 \\ \times 8 \\ \hline \end{array}$ 4000	10. $\begin{array}{r} 91 \\ \times 9 \\ \hline \end{array}$ 810	11. $\begin{array}{r} 62 \\ \times 2 \\ \hline \end{array}$ 120	12. $\begin{array}{r} 708 \\ \times 5 \\ \hline \end{array}$ 3500
13. $\begin{array}{r} 129 \\ \times 7 \\ \hline \end{array}$ 700	14. $\begin{array}{r} 37 \\ \times 6 \\ \hline \end{array}$ 240	15. $\begin{array}{r} 643 \\ \times 3 \\ \hline \end{array}$ 1800	16. $\begin{array}{r} 189 \\ \times 8 \\ \hline \end{array}$ 1600

**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 13.91 \\ + \quad 4.73 \\ \hline 18.64 \end{array}$$

$$\begin{array}{r} 2. \quad \$8.61 \\ - \quad 3.43 \\ \hline \$5.18 \end{array}$$

$$\begin{array}{r} 3. \quad 7.6 \\ \times \quad 5 \\ \hline 38 \end{array}$$

$$4. \quad \overset{70}{7 \overline{)490}}$$

$$\begin{array}{r} 5. \quad 12.07 \\ - \quad 3.94 \\ \hline 8.13 \end{array}$$

$$\begin{array}{r} 6. \quad \$875 \\ \times \quad 6 \\ \hline \$5250 \end{array}$$

$$\begin{array}{r} 7. \quad 207 \\ \quad 914 \\ + \quad 683 \\ \hline 1804 \end{array}$$

$$\begin{array}{r} 8. \quad 5001 \\ - \quad 426 \\ \hline 4575 \end{array}$$

$$9. \quad \overset{60}{8 \overline{)480}}$$

$$\begin{array}{r} 10. \quad 348 \\ \times \quad 6 \\ \hline 2088 \end{array}$$

$$11. \quad 3 \times (46 - 27) \\ 57$$

$$12. \quad 8 \times 3 \times 2 \times 7 \\ 336$$

$$13. \quad \$467 + \$219 + \$83 \\ \$769$$

$$14. \quad 27 \div 3 \quad 9$$

$$15. \quad 9 \times 1.6 \\ 14.4$$

$$16. \quad 4039 - 2777 \\ 1262$$

Solve. Show your work.

17. John found three good paperbacks at the book store. They cost \$2.25, \$1.95 and \$0.89. How much did all three cost?  $\$5.09$

18. An egg crate holds 8 layers, each with 72 eggs. How many eggs does the crate hold?  $576$

19. The tourist bureau gave 400 maps to Memorial School. The 8 classes will share them equally. How many will each class get?  $50$

20. When Lief put his toy train together, he used an engine which is 3.7 cm long and 3 cars each 2.9 cm long. How long is the train?  $12.4 \text{ cm}$

21. A bicycle tour was planned so that 1000 km would be travelled in 8 d. After 7 d, the bicyclists had travelled 775 km, having to stay indoors for one day because of bad weather. How many kilometres remained to be travelled?  $225 \text{ km}$

22. Mr. Zitzlsperger has a chance to take his 4 children along on a business trip. Air fare for each would be \$128. How much would it cost to take the 4 children along?  $\$512$

## Multiplying Two-Digit Numbers by Multiples of Ten

Multiply.

$\begin{array}{r} 1. \quad 35 \\ \quad 80 \\ \hline 2800 \end{array}$ <p><math>0 \times 35</math></p> <p><math>8 \text{ tens} \times 35 = 280 \text{ tens}</math></p>	$\begin{array}{r} 2. \quad 62 \\ \quad 30 \\ \hline 1860 \end{array}$ <p><math>0 \times 62</math></p> <p><math>3 \text{ tens} \times 62 = 186 \text{ tens}</math></p>	$\begin{array}{r} 3. \quad 48 \\ \quad 50 \\ \hline 2400 \end{array}$	$\begin{array}{r} 4. \quad 13 \\ \quad 70 \\ \hline 910 \end{array}$
---	---	---	--

$\begin{array}{r} 5. \quad 47 \\ \quad 20 \\ \hline 940 \end{array}$	$\begin{array}{r} 6. \quad 28 \\ \quad 60 \\ \hline 1680 \end{array}$	$\begin{array}{r} 7. \quad 73 \\ \quad 40 \\ \hline 2920 \end{array}$	$\begin{array}{r} 8. \quad 85 \\ \quad 30 \\ \hline 2550 \end{array}$	$\begin{array}{r} 9. \quad 98 \\ \quad 80 \\ \hline 7840 \end{array}$
$\begin{array}{r} 10. \quad 24 \\ \quad 40 \\ \hline 960 \end{array}$	$\begin{array}{r} 11. \quad 63 \\ \quad 90 \\ \hline 5670 \end{array}$	$\begin{array}{r} 12. \quad 56 \\ \quad 60 \\ \hline 3360 \end{array}$	$\begin{array}{r} 13. \quad 79 \\ \quad 70 \\ \hline 5530 \end{array}$	$\begin{array}{r} 14. \quad 87 \\ \quad 50 \\ \hline 4350 \end{array}$

SPM4/U10/238-239

## Multiplying Two-Digit Numbers by Two-Digit Numbers

Multiply.

$\begin{array}{r} 1. \quad 26 \\ \quad 37 \\ \hline 182 \\ 780 \\ \hline 962 \end{array}$ <p><math>7 \times 26</math></p> <p><math>30 \times 26</math></p>	$\begin{array}{r} 2. \quad 38 \\ \quad 24 \\ \hline 152 \\ 760 \\ \hline 912 \end{array}$ <p><math>4 \times 38</math></p> <p><math>20 \times 38</math></p>	$\begin{array}{r} 3. \quad 43 \\ \quad 83 \\ \hline 3569 \end{array}$	$\begin{array}{r} 4. \quad 59 \\ \quad 19 \\ \hline 1121 \end{array}$	$\begin{array}{r} 5. \quad 76 \\ \quad 45 \\ \hline 3420 \end{array}$
--	--	---	---	---

$\begin{array}{r} 6. \quad 17 \\ \quad 36 \\ \hline 612 \end{array}$	$\begin{array}{r} 7. \quad 85 \\ \quad 19 \\ \hline 1615 \end{array}$	$\begin{array}{r} 8. \quad 38 \\ \quad 47 \\ \hline 1786 \end{array}$	$\begin{array}{r} 9. \quad 46 \\ \quad 25 \\ \hline 1150 \end{array}$	$\begin{array}{r} 10. \quad 72 \\ \quad 34 \\ \hline 2448 \end{array}$
$\begin{array}{r} 11. \quad 80 \\ \quad 68 \\ \hline 5440 \end{array}$	$\begin{array}{r} 12. \quad 95 \\ \quad 23 \\ \hline 2185 \end{array}$	$\begin{array}{r} 13. \quad 48 \\ \quad 35 \\ \hline 1680 \end{array}$	$\begin{array}{r} 14. \quad 63 \\ \quad 52 \\ \hline 3276 \end{array}$	$\begin{array}{r} 15. \quad 47 \\ \quad 79 \\ \hline 3713 \end{array}$



## Multiplying Three-Digit Numbers by Multiples of Ten

Multiply.

$\begin{array}{r} 1. \quad \overset{2}{7}84 \\ \quad \quad \underline{30} \\ 23\,520 \end{array}$ <p><math>0 \times 784</math></p> <p><math>3 \text{ tens} \times 784</math></p>	$\begin{array}{r} 2. \quad \overset{1}{1}29 \\ \quad \quad \underline{50} \\ 6450 \end{array}$ <p><math>0 \times 129</math></p> <p><math>5 \text{ tens} \times 129</math></p>	$\begin{array}{r} 3. \quad 247 \\ \quad \quad \underline{40} \\ 9880 \end{array}$	$\begin{array}{r} 4. \quad 365 \\ \quad \quad \underline{20} \\ 7300 \end{array}$
--	---	---	---

$\begin{array}{r} 5. \quad 826 \\ \quad \quad \underline{70} \\ 57\,820 \end{array}$	$\begin{array}{r} 6. \quad 247 \\ \quad \quad \underline{60} \\ 14\,820 \end{array}$	$\begin{array}{r} 7. \quad 758 \\ \quad \quad \underline{50} \\ 37\,900 \end{array}$	$\begin{array}{r} 8. \quad 489 \\ \quad \quad \underline{40} \\ 19\,560 \end{array}$	$\begin{array}{r} 9. \quad 718 \\ \quad \quad \underline{90} \\ 64\,620 \end{array}$
$\begin{array}{r} 10. \quad 924 \\ \quad \quad \underline{80} \\ 73\,920 \end{array}$	$\begin{array}{r} 11. \quad 316 \\ \quad \quad \underline{60} \\ 18\,960 \end{array}$	$\begin{array}{r} 12. \quad 639 \\ \quad \quad \underline{30} \\ 19\,170 \end{array}$	$\begin{array}{r} 13. \quad 107 \\ \quad \quad \underline{80} \\ 8560 \end{array}$	$\begin{array}{r} 14. \quad 517 \\ \quad \quad \underline{70} \\ 36\,190 \end{array}$

SPM4/U10/244-245

## Multiplying Three-Digit Numbers by Two-Digit Numbers

Multiply.

$\begin{array}{r} 1. \quad \overset{1}{3}14 \\ \quad \quad \underline{29} \\ 2826 \\ 6280 \\ \hline 9106 \end{array}$ <p><math>9 \times 314</math></p> <p><math>20 \times 314</math></p>	$\begin{array}{r} 2. \quad \overset{2}{2}68 \\ \quad \quad \underline{63} \\ 804 \\ 16080 \\ \hline 16884 \end{array}$ <p><math>3 \times 268</math></p> <p><math>60 \times 268</math></p>	$\begin{array}{r} 3. \quad 492 \\ \quad \quad \underline{17} \\ 8364 \end{array}$	$\begin{array}{r} 4. \quad 856 \\ \quad \quad \underline{26} \\ 22256 \end{array}$
--	---	---	--

$\begin{array}{r} 5. \quad 145 \\ \quad \quad \underline{46} \\ 6670 \end{array}$	$\begin{array}{r} 6. \quad 739 \\ \quad \quad \underline{23} \\ 16997 \end{array}$	$\begin{array}{r} 7. \quad 519 \\ \quad \quad \underline{38} \\ 19722 \end{array}$	$\begin{array}{r} 8. \quad 360 \\ \quad \quad \underline{93} \\ 33480 \end{array}$	$\begin{array}{r} 9. \quad 463 \\ \quad \quad \underline{48} \\ 22224 \end{array}$
$\begin{array}{r} 10. \quad 593 \\ \quad \quad \underline{59} \\ 34987 \end{array}$	$\begin{array}{r} 11. \quad 673 \\ \quad \quad \underline{72} \\ 48456 \end{array}$	$\begin{array}{r} 12. \quad 204 \\ \quad \quad \underline{85} \\ 17340 \end{array}$	$\begin{array}{r} 13. \quad 178 \\ \quad \quad \underline{18} \\ 3204 \end{array}$	$\begin{array}{r} 14. \quad 390 \\ \quad \quad \underline{66} \\ 25740 \end{array}$

**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 305 \\ \times 7 \\ \hline 2135 \end{array}$$

$$\begin{array}{r} 2. \quad 3.9 \\ + 6.8 \\ \hline 10.7 \end{array}$$

$$\begin{array}{r} 3. \quad 481 \\ \times 30 \\ \hline 14430 \end{array}$$

$$4. \quad 9 \overline{)36}^4$$

$$\begin{array}{r} 5. \quad \$10.08 \\ - 4.92 \\ \hline \$ 5.16 \end{array}$$

$$\begin{array}{r} 6. \quad 218 \\ 763 \\ + 495 \\ \hline 1476 \end{array}$$

$$\begin{array}{r} 7. \quad 28 \\ \times 65 \\ \hline 1820 \end{array}$$

$$\begin{array}{r} 8. \quad \$12.97 \\ - 8.38 \\ \hline \$ 4.59 \end{array}$$

$$9. \quad 9 \overline{)540}^{60}$$

$$\begin{array}{r} 10. \quad 285 \\ \times 43 \\ \hline 12255 \end{array}$$

$$11. \quad 27 \times (238 - 146) \\ 2484$$

$$12. \quad 8 \times 9 \times 3 \times 7 \\ 1512$$

$$13. \quad 40 \times 123 \\ 4920$$

$$14. \quad 810 \div 9 \\ 90$$

$$15. \quad 2718 - 945 \\ 1773$$

$$16. \quad \$486 + \$211 + \$573 \\ \$1270$$

Solve. Show your work.

17. Three charter airplanes, each carrying 276 passengers, are leaving for a holiday in Montreal. How many passengers are on the airplanes? **828**

18. Marcia went to the Fair with \$10.00. The train ticket cost \$2.47. The admission charge was \$1.50. How much did she have left to spend? **\$6.03**

19. Mrs. Filippelli was given 45 ticket books for her classes. Each book has 12 tickets. How many tickets is this in all? **540**

20. 300 boys and girls are going to visit Upper Canada Village. Each bus holds 50 people. How many buses are needed? **6**

21. The house has 38 windows. Each window has 12 panes of glass. How many panes is this? **456**

22. The three girls running the legs of the relay had the following times: 6.7 s, 5.9 s, and 6.3 s. What is the total of these times? **18.9 s**

NAME \_\_\_\_\_

SPM4/U11/250-251

## Using Multiplication to Divide

Find the quotient and the remainder.

$$\begin{array}{r} 5 \text{ R } 3 \\ 6 \overline{)33} \\ \underline{30} \phantom{0} \\ 3 \end{array}$$

$6 \times 5 = 30$

$$\begin{array}{r} 7 \text{ R } 5 \\ 9 \overline{)68} \\ \underline{63} \phantom{0} \\ 5 \end{array}$$

$9 \times 7 = 63$

$$3 \overline{)20} \quad 6 \text{ R } 2$$

$$7 \overline{)38} \quad 5 \text{ R } 3$$

$$4 \overline{)15} \quad 3 \text{ R } 3$$

$$8 \overline{)59} \quad 7 \text{ R } 3$$

$$2 \overline{)19} \quad 9 \text{ R } 1$$

$$5 \overline{)42} \quad 8 \text{ R } 2$$

$$8 \overline{)30} \quad 3 \text{ R } 6$$

$$4 \overline{)30} \quad 7 \text{ R } 2$$

$$7 \overline{)67} \quad 9 \text{ R } 4$$

$$9 \overline{)53} \quad 5 \text{ R } 8$$

$$6 \overline{)50} \quad 8 \text{ R } 2$$

$$5 \overline{)36} \quad 7 \text{ R } 1$$

## Practice

Solve. Show your work.

- Sixteen contestants are entered in each of the 8 divisions of the tournament. How many have entered the tournament?  $128$
- The temperature in the electric furnace is  $875^{\circ}\text{C}$ . When it cools  $180^{\circ}$ , Professor O'Day will open it. At what temperature will it be then?  $695^{\circ}\text{C}$
- Curtis has to bicycle 1.8 km to visit Luke. From Luke's to Fran's it is 2.2 km. From Fran's to Jeremy's it is 1.7 km. How far must Curtis bicycle to visit all three friends?  $5.7 \text{ km}$
- The 63 student visitors from Mexico are to be carried from the airport in 9 vans. The same number are to be carried in each of the vans. How many should each van carry?  $7$
- An excursion fare to Ireland is \$435 return. Mr. O'Leary bought 17 seats for his travel agency. What did this cost?  $\$7395$
- A full 747 airliner can carry 428 passengers. The smaller 727 carries only 144. How many more people can the 747 carry?  $284$



## Sharing Tens

Divide.

1. $\overset{30}{2}\overline{)60}$ $2 \times 3 \text{ tens} = 6 \text{ tens}$	2. $\overset{30}{3}\overline{)90}$ $3 \times \underline{3} \text{ tens} = 9 \text{ tens}$	3. $\overset{20}{3}\overline{)60}$	4. $\overset{10}{6}\overline{)60}$
5. $\overset{10}{7}\overline{)70}$	6. $\overset{20}{4}\overline{)80}$	7. $\overset{10}{5}\overline{)50}$	8. $\overset{20}{2}\overline{)40}$
9. $\overset{40}{2}\overline{)80}$	10. $\overset{30}{3}\overline{)90}$	11. $\overset{30}{2}\overline{)60}$	12. $\overset{10}{8}\overline{)80}$

SPM4/U11/253

## Sharing Tens and Ones

Divide.

1. $\overset{1}{4}\overline{)84}$ $\overset{20}{20} \rightarrow 21$ $\underline{80} \leftarrow 4 \times 20$ $\overset{4}{4}$ $\underline{4} \leftarrow 4 \times 1$ $\underline{0}$	2. $\overset{2}{3}\overline{)96}$ $\overset{30}{30} \rightarrow 32$ $\underline{90} \leftarrow 3 \times 30$ $\overset{6}{6}$ $\underline{6}$ $\underline{0}$	3. $\overset{34}{2}\overline{)68}$	4. $\overset{11}{6}\overline{)66}$
---	---	------------------------------------	------------------------------------

5. $\overset{43}{2}\overline{)86}$	6. $\overset{12}{4}\overline{)48}$	7. $\overset{23}{3}\overline{)69}$	8. $\overset{21}{4}\overline{)84}$	9. $\overset{44}{2}\overline{)88}$
10. $\overset{31}{3}\overline{)93}$	11. $\overset{11}{7}\overline{)77}$	12. $\overset{12}{3}\overline{)36}$	13. $\overset{22}{4}\overline{)88}$	14. $\overset{42}{2}\overline{)84}$

## Sharing Hundreds, Tens, and Ones

Divide.

$  \begin{array}{r}  2 \\  40 \phantom{00} \left] \rightarrow 342 \\  300 \phantom{00} \\  \hline  1. \ 2 \overline{)684} \\  \underline{600} \phantom{00} \leftarrow 2 \times 300 \\  84 \phantom{00} \\  \underline{80} \phantom{00} \leftarrow 2 \times 40 \\  4 \phantom{00} \\  \underline{4} \phantom{00} \leftarrow 2 \times 2 \\  0  \end{array}  $	$  \begin{array}{r}  2 \\  10 \phantom{00} \left] \rightarrow 312 \\  300 \phantom{00} \\  \hline  2. \ 3 \overline{)936} \\  \underline{900} \phantom{00} \leftarrow 3 \times 300 \\  36 \phantom{00} \\  \underline{30} \phantom{00} \\  6 \phantom{00} \\  \underline{6} \phantom{00} \\  0  \end{array}  $	$  \begin{array}{r}  120 \\  4 \overline{)480}  \end{array}  $	$  \begin{array}{r}  143 \\  2 \overline{)286}  \end{array}  $
---	--	--	--

$$5. \ 3 \overline{)366} \quad \begin{array}{r} 122 \end{array}$$

$$6. \ 6 \overline{)660} \quad \begin{array}{r} 110 \end{array}$$

$$7. \ 4 \overline{)844} \quad \begin{array}{r} 211 \end{array}$$

$$8. \ 2 \overline{)842} \quad \begin{array}{r} 421 \end{array}$$

$$9. \ 3 \overline{)693} \quad \begin{array}{r} 231 \end{array}$$

## Regrouping Tens

Divide.

$  \begin{array}{r}  5 \\  20 \phantom{00} \left] \rightarrow 25 \\  300 \phantom{00} \\  \hline  1. \ 3 \overline{)75} \\  \underline{60} \phantom{00} \leftarrow 3 \times 20 \\  15 \phantom{00} \\  \underline{15} \phantom{00} \leftarrow 3 \times 5 \\  0  \end{array}  $	$  \begin{array}{r}  7 \\  40 \phantom{00} \left] \rightarrow 47 \\  200 \phantom{00} \\  \hline  2. \ 2 \overline{)94} \\  \underline{80} \phantom{00} \leftarrow 2 \times 40 \\  14 \phantom{00} \\  \underline{14} \phantom{00} \\  0  \end{array}  $	$  \begin{array}{r}  13 \\  4 \overline{)52}  \end{array}  $	$  \begin{array}{r}  29 \\  3 \overline{)87}  \end{array}  $
--	--	--	--

$$5. \ 2 \overline{)56} \quad \begin{array}{r} 28 \end{array}$$

$$6. \ 7 \overline{)98} \quad \begin{array}{r} 14 \end{array}$$

$$7. \ 5 \overline{)70} \quad \begin{array}{r} 14 \end{array}$$

$$8. \ 6 \overline{)84} \quad \begin{array}{r} 14 \end{array}$$

$$9. \ 4 \overline{)72} \quad \begin{array}{r} 18 \end{array}$$

**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 8.35 \\ - 4.78 \\ \hline 3.57 \end{array}$$

$$\begin{array}{r} 2. \quad \$2.18 \\ + 9.75 \\ \hline \$11.93 \end{array}$$

$$3. \quad 2 \overline{)46} \begin{array}{l} 23 \\ 46 \end{array}$$

$$4. \quad 3 \overline{)693} \begin{array}{l} 231 \\ 693 \end{array}$$

$$\begin{array}{r} 5. \quad 286 \\ \times 7 \\ \hline 2002 \end{array}$$

$$\begin{array}{r} 6. \quad 72 \\ \times 48 \\ \hline 3456 \end{array}$$

$$\begin{array}{r} 7. \quad \$4286 \\ + 5192 \\ \hline \$9478 \end{array}$$

$$8. \quad 7 \overline{)84} \begin{array}{l} 12 \\ 84 \end{array}$$

$$\begin{array}{r} 9. \quad \$8.62 \\ \times 8 \\ \hline \$68.96 \end{array}$$

$$\begin{array}{r} 10. \quad 402 \\ - 86 \\ \hline 316 \end{array}$$

$$11. \quad 57 \div 3 = 19$$

$$12. \quad 17 \times 258 = 4386$$

$$13. \quad 76 \div 4 = 19$$

$$14. \quad 2117 - 840 = 1277$$

$$15. \quad (219 - 187) \times 24 = 768$$

$$16. \quad 6 \times (4.7 + 9.3) = 84.0$$

$$17. \quad 3 \times 8 \times 9 \times 7 = 1512$$

Solve. Show your work.

18. What is the perimeter of a triangular city block whose sides are 217 m, 421 m, and 364 m?  $1002 \text{ m}$

19. How many eggs are there in 16 dozen?  $192$

20. The January blizzard left 78.4 cm of snow in Regina. By the weekend, the level was down to 49.8 cm. How much snow had melted?  $28.6 \text{ cm}$

21. Each of 6 boys raised the same amount for the project. The total amount was \$96. How much did each boy raise?  $\$16$

22. The inside of the movie theatre was long and narrow. It had 38 rows of seats, but only 8 seats in each row. How many seats were in the theatre?  $304$

23. When Mrs. Potts ordered furniture for the school, the price was \$2785. The discount to the school was \$496. How much did the school have to pay?  $\$2289$



## Sharing Hundreds, Regrouping Tens

Divide.

$  \begin{array}{r}  8 \phantom{00} \left. \begin{array}{l} 40 \\ 200 \end{array} \right\} \rightarrow 248 \\  2 \overline{) 496} \\  \underline{400} \phantom{00} \leftarrow 2 \times 200 \\  96 \phantom{00} \\  \underline{80} \phantom{00} \leftarrow 2 \times 40 \\  16 \phantom{00} \\  \underline{16} \phantom{00} \leftarrow 2 \times 8 \\  0  \end{array}  $	$  \begin{array}{r}  3 \phantom{00} \left. \begin{array}{l} 10 \\ 200 \end{array} \right\} \rightarrow 213 \\  4 \overline{) 852} \\  \underline{800} \phantom{00} \leftarrow 4 \times 200 \\  52 \phantom{00} \\  \underline{40} \phantom{00} \\  12 \phantom{00} \\  \underline{12} \phantom{00} \\  0  \end{array}  $	$  \begin{array}{r}  229 \\  3 \overline{) 687}  \end{array}  $	$  \begin{array}{r}  113 \\  7 \overline{) 791}  \end{array}  $
---	--	---	---

$$\begin{array}{r}
 317 \\
 3 \overline{) 951}
 \end{array}$$

$$\begin{array}{r}
 118 \\
 4 \overline{) 472}
 \end{array}$$

$$\begin{array}{r}
 326 \\
 2 \overline{) 652}
 \end{array}$$

$$\begin{array}{r}
 125 \\
 3 \overline{) 375}
 \end{array}$$

$$\begin{array}{r}
 223 \\
 4 \overline{) 892}
 \end{array}$$

## Regrouping Hundreds

Divide.

$  \begin{array}{r}  2 \phantom{00} \left. \begin{array}{l} 60 \end{array} \right\} \rightarrow 62 \\  4 \overline{) 248} \\  \underline{240} \phantom{00} \leftarrow 4 \times 60 \\  8 \phantom{00} \\  \underline{8} \phantom{00} \leftarrow 4 \times 2 \\  0  \end{array}  $	$  \begin{array}{r}  3 \phantom{00} \left. \begin{array}{l} 90 \end{array} \right\} \rightarrow 93 \\  2 \overline{) 186} \\  \underline{180} \phantom{00} \leftarrow 2 \times 90 \\  6 \phantom{00} \\  \underline{6} \phantom{00} \\  0  \end{array}  $	$  \begin{array}{r}  62 \\  3 \overline{) 186}  \end{array}  $	$  \begin{array}{r}  41 \\  7 \overline{) 287}  \end{array}  $
---	---	--	--

$$\begin{array}{r}
 91 \\
 5 \overline{) 455}
 \end{array}$$

$$\begin{array}{r}
 31 \\
 6 \overline{) 186}
 \end{array}$$

$$\begin{array}{r}
 72 \\
 3 \overline{) 216}
 \end{array}$$

$$\begin{array}{r}
 71 \\
 8 \overline{) 568}
 \end{array}$$

$$\begin{array}{r}
 81 \\
 9 \overline{) 729}
 \end{array}$$

## Regrouping Hundreds, Regrouping Tens

Divide.

$  \begin{array}{r}  9 \phantom{00} \phantom{00} \phantom{00} \\  40 \phantom{00} \phantom{00} \phantom{00} \rightarrow 149 \text{ R1} \\  100 \phantom{00} \phantom{00} \phantom{00} \\  1. \quad 3 \overline{)448} \\  \underline{300} \phantom{00} \leftarrow 3 \times 100 \\  148 \\  \underline{120} \phantom{00} \leftarrow 3 \times 40 \\  28 \\  \underline{27} \phantom{00} \leftarrow 3 \times 9 \\  1  \end{array}  $	$  \begin{array}{r}  7 \phantom{00} \phantom{00} \phantom{00} \\  90 \phantom{00} \phantom{00} \phantom{00} \rightarrow 397 \text{ R1} \\  300 \phantom{00} \phantom{00} \phantom{00} \\  2. \quad 2 \overline{)795} \\  \underline{600} \phantom{00} \leftarrow 2 \times 300 \\  195 \\  \underline{180} \\  15 \\  \underline{14} \\  1  \end{array}  $	$  \begin{array}{r}  239 \text{ R2} \\  3. \quad 4 \overline{)958} \\  \end{array}  \qquad  \begin{array}{r}  136 \\  4. \quad 7 \overline{)952} \\  \end{array}  $
--	---	---

5. $8 \overline{)984} \quad \begin{array}{r} 123 \end{array}$	6. $6 \overline{)892} \quad \begin{array}{r} 148 \text{ R4} \end{array}$	7. $3 \overline{)737} \quad \begin{array}{r} 245 \text{ R2} \end{array}$	8. $2 \overline{)950} \quad \begin{array}{r} 475 \end{array}$	9. $9 \overline{)663} \quad \begin{array}{r} 73 \text{ R6} \end{array}$
---	--	--	---	---

## Finding an Average

Divide to find an average for each.

<p>1. 6 pairs of shoes cost \$210. The average cost is \$35.</p> $  \begin{array}{r}  5 \phantom{00} \phantom{00} \phantom{00} \\  30 \phantom{00} \phantom{00} \phantom{00} \rightarrow 35 \\  6 \overline{)210} \\  \underline{180} \\  30 \\  \underline{30} \\  0  \end{array}  $	<p>2. 189 points were scored in 9 football games. The average number scored each game was 21.</p> $  \begin{array}{r}  1 \phantom{00} \phantom{00} \phantom{00} \\  20 \phantom{00} \phantom{00} \phantom{00} \rightarrow 21 \\  9 \overline{)189} \\  \underline{180} \\  9 \\  \underline{9} \\  0  \end{array}  $	<p>3. 280 children rode on 5 buses. The average number on each bus was 56.</p> $  \begin{array}{r}  56 \\  5 \overline{)280} \\  \underline{250} \\  30 \\  \underline{30} \\  0  \end{array}  $
---	--	--

- |  |   |   |
|--|---|---|
| <p>4. 105 nightcrawlers were found in 7 nights. <span style="float: right;">15</span></p> <p>The average number found each night was 15.</p> | <p>5. 280 sandwiches were ordered by the 8 classes. <span style="float: right;">35</span></p> <p>The average number ordered by each class was 35.</p> | <p>6. In 3 h, the telethon received 825 pledges. <span style="float: right;">275</span></p> <p>The average number of pledges each hour was 275.</p> |
|--|---|---|

## A Shorter Form for Division

Divide.

$  \begin{array}{r}  52 \text{ R } 1 \\  7 \overline{) 365} \\  \underline{350} \quad \leftarrow 7 \times 50 \\  15 \\  \underline{14} \quad \leftarrow 7 \times 2 \\  1  \end{array}  $	$  \begin{array}{r}  76 \\  6 \overline{) 456} \\  \underline{420} \quad \leftarrow 6 \times 70 \\  36 \\  \underline{36} \\  0  \end{array}  $	$  \begin{array}{r}  152 \text{ R } 1 \\  2 \overline{) 305}  \end{array}  $	$  \begin{array}{r}  267 \\  3 \overline{) 801}  \end{array}  $
--	---	--	---

$$5. \begin{array}{r} 20 \text{ R } 7 \\ 8 \overline{) 167} \end{array}$$

$$6. \begin{array}{r} 87 \text{ R } 3 \\ 5 \overline{) 438} \end{array}$$

$$7. \begin{array}{r} 17 \text{ R } 6 \\ 7 \overline{) 125} \end{array}$$

$$8. \begin{array}{r} 59 \\ 4 \overline{) 236} \end{array}$$

$$9. \begin{array}{r} 38 \text{ R } 8 \\ 9 \overline{) 350} \end{array}$$

$$10. \begin{array}{r} 53 \text{ R } 4 \\ 8 \overline{) 428} \end{array}$$

$$11. \begin{array}{r} 26 \\ 4 \overline{) 104} \end{array}$$

$$12. \begin{array}{r} 152 \\ 3 \overline{) 456} \end{array}$$

$$13. \begin{array}{r} 57 \\ 5 \overline{) 285} \end{array}$$

$$14. \begin{array}{r} 139 \text{ R } 5 \\ 6 \overline{) 839} \end{array}$$

## Practice

Solve. Show your work.

- Yuri's scores on 7 tests totalled 595 points. What was his average score?  $85$
- Each train ticket costs \$42. The club needs 27 tickets. How much will they cost?  $\$1134$
- The restaurant spent \$2348 for labor, \$1941 for food, and \$3728 for other expenses this month. What was its total cost?  $\$8017$
- Judd began his jewellery project with 76.8 cm of silver wire. There were 57.9 cm when he finished. How much wire did he use?  $18.9 \text{ cm}$
- A cucumber is 20.9 cm long. Yesterday it was 17.6 cm long. How much did it grow in one day?  $3.3 \text{ cm}$
- When 516 school children are divided as evenly as possible into 8 groups, how many will each group have?  $4 \text{ groups will have } 64 \text{ and } 4 \text{ groups will have } 65.$



**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 3.64 \\ + 7.28 \\ \hline 10.92 \end{array}$$

$$\begin{array}{r} 2. \quad 60 \\ \times 7 \\ \hline 420 \end{array}$$

$$\begin{array}{r} 3. \quad \$11.94 \\ - 3.27 \\ \hline \$8.67 \end{array}$$

$$4. \quad \overset{104}{4 \overline{)416}}$$

$$\begin{array}{r} 5. \quad 648 \\ \times 27 \\ \hline 17496 \end{array}$$

$$\begin{array}{r} 6. \quad 803 \\ - 75 \\ \hline 728 \end{array}$$

$$\begin{array}{r} 7. \quad 2184 \\ \quad 906 \\ + 1375 \\ \hline 4465 \end{array}$$

$$8. \quad \overset{67}{4 \overline{)268}}$$

$$9. \quad \overset{26}{8 \overline{)215}} R7$$

$$\begin{array}{r} 10. \quad 7.8 \\ - 2.9 \\ \hline 4.9 \end{array}$$

$$11. \quad 420 \div 7 \\ 60$$

$$12. \quad 83 \times 41 \\ 3403$$

$$13. \quad \$621 + \$842 + \$917 \\ \$2380$$

$$14. \quad 4.73 - 2.68 \\ 2.05$$

$$15. \quad 2 \times 8 \times 40 \\ 640$$

$$16. \quad 416 \div (2.3 + 4.7) \\ 59 R3$$

Solve. Show your work.

17. Ariana and her friend are going on a ski trip. Each will rent equipment for \$7.95, buy lift tickets for \$12.50, and pay driving costs of \$8.55. What will the trip cost each girl?  $\$29.00$

18. Mrs. Diamantopoulos baked 350 pastries. She wrapped 8 to a paper plate for the bake sale. How many plates did she fill?  $43$

19. The petition had 315 pages with 32 names on each page. How many names were on the petition?  $10080$

20. The card has a length of 7.5 cm and a width of 5.2 cm. What is its perimeter?  $25.4 \text{ cm}$

21. At noon the temperature was  $31.3^{\circ}\text{C}$ . By evening it was  $27.6^{\circ}\text{C}$ . How much did it drop?  $3.7^{\circ}\text{C}$

22. The children lined up in 7 rows of 45 each. How many children were there?  $315$

NAME \_\_\_\_\_

SPM4/U12/272-275

## Small Amounts

Would you measure length, capacity, mass, or time?

1. How much cough syrup is in a spoon? <i>capacity</i>	2. How light is a maple leaf? <i>mass</i>	3. How long is the beak of a chicken? <i>length</i>
4. How long does it take to fall to the ground? <i>time</i>	5. How much water is in an eye dropper? <i>capacity</i>	6. How much ribbon is on a spool? <i>length</i>
7. How far does a snail crawl? <i>length</i>	8. How long does it take to start a car? <i>time</i>	9. How much tea is in a tea bag? <i>mass</i>
10. How heavy is a bee? <i>mass</i>	11. How far does a bee travel? <i>length</i>	12. How much honey is in a bee hive? <i>capacity (or mass)</i>
13. How long is a TV commercial? <i>time</i>	14. How thin is a human hair? <i>length</i>	15. How much of a load is the truck carrying? <i>mass (or capacity)</i>

SPM4/U12/276-277

## Units of Time

Complete .

1. 1 min = <u>60</u> s 1 h = <u>60</u> min 1 d = <u>24</u> h 1 week = <u>7</u> d 1 year = <u>365</u> d	2. 7 min = <u>420</u> s 4. 2 h 8 min = <u>128</u> min 6. 100 s = <u>1</u> min <u>40</u> s	3. 400 d = <u>1</u> year <u>35</u> d 5. 50 h = <u>2</u> d <u>2</u> h 7. 3 weeks 2 d = <u>23</u> d
--	---	---

8. 3 h = 180 min  
10. 150 s = 2 min 30 s  
12. 2 d 12 h = 60 h  
14. 130 min = 2 h 10 min  
16. 4 weeks 3 d = 31 d

9. 4 d = 96 h  
11. 10 weeks = 70 d  
13. 15 d = 2 weeks 1 d  
15. 30 h = 1 d 6 h  
17. 2 years = 730 d

## The 24-Hour Clock

What would a 12-hour clock show for

1. 20:30? 8:30 p.m.	2. 06:15? 6:15	3. 22:00? 10:00 p.m.
4. 01:30? 1:30 a.m.	5. 15:15? 3:15 p.m.	6. 12:45? 12:45 p.m.
7. 4 h later than 13:00? 5:00 p.m.	8. 2 h 30 min earlier than 10:45? 8:15 a.m.	9. 5 h 40 min later than 09:00? 2:40 p.m.

What would a 24-hour clock show for

10. 9:30 a.m.? 09:30	11. 7 p.m.? 19:00	12. 5:20 p.m.? 17:20
13. 9:05 p.m.? 21:05	14. 11:45 a.m.? 11:45	15. 12:30 a.m.? 00:30
16. 4 h later than 1 p.m.? 17:00	17. 2 h 30 min earlier than 10:45 a.m.? 08:15	18. 5 h 40 min later than 9 a.m.? 14:40

## Practice

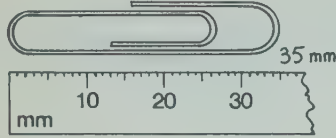



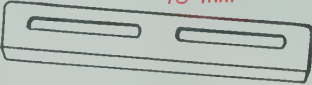

Solve. Show your work.

- The ferry boat has been bringing vacationers to the island. On two trips it was full with 280 passengers. On the third trip it had 217 passengers. How many did it carry in all? 777
- The planners for the political rally expected 7500 people. Actually, 1785 fewer than this attended. How many came to the rally. 5715
- The car rental people charged Mr. Berend 9¢/km. He drove 576 km. How much did this cost? \$51.84
- Pete's group began its hike at 10:15 a.m. The boys finished 2 h 20 min later. What time was it then? 12:35 p.m.
- Aunt Matty left \$588 to her 3 nieces. They shared it equally. How much did each receive? \$196
- The plant's growth in the past 2 d was 4.19 cm and 6.78 cm. What was the total growth? 10.97 cm



## Length in Millimetres

Measure each in millimetres.

<p>1.  35 mm</p>	<p>2.  20 mm</p> <p style="text-align: center; border: 1px dashed black; border-radius: 10px; padding: 2px;">Use a ruler.</p>	<p>3.  30 mm</p>
<p>4.  25 mm</p>	<p>5.  40 mm</p>	<p>6.  15 mm</p>

Choose the best estimate for

7. the diameter of a penny.

35 mm   20 mm   10 mm   20 mm

8. the height of an ant.

1 mm   1 cm   15 mm   1 mm

9. length of a front tooth.

1 mm   1 cm   100 mm   1 cm

10. thickness of your ear lobe.

1 mm   1 cm   5 mm   5 mm

## Four Units of Length

Which unit, the millimetre, the centimetre, the metre, or the kilometre, is best for measuring

<p>1. the length of a basketball court? metre</p>	<p>2. the distance from Halifax to Fredericton? kilometre</p>	<p>3. the thickness of a piece of cardboard? millimetre</p>
<p>4. the perimeter of a garden? metre</p>	<p>5. the length of an envelope? centimetre</p>	<p>6. the length of a dog's tail? centimetre</p>
<p>7. the length of the eye of a needle? millimetre</p>	<p>8. the length of a train ride? kilometre</p>	<p>9. the length of a train? metre</p>

Choose the best estimate for

10. the length of a ski.

150 mm   150 cm   150 m   150 cm

11. the length of a piece of chalk.

80 mm   80 cm   80 km   80 mm

12. the height of a ceiling.

3 cm   3 m   3 km   3 m

13. the length of a country road.

10 mm   10 m   10 km   10 km

## Practice

Would you measure length, capacity, mass, or time to find

- |  |   |
|--|---|
| 1. how much milk a kitten drinks? <i>capacity</i>      | 2. how heavy a safety pin is? <i>mass</i>         |
| 3. how long to make a necklace? <i>time</i>            | 4. the thickness of a finger? <i>length</i>       |
| 5. the amount of water a sponge holds? <i>capacity</i> | 6. how long between blinks of an eye? <i>time</i> |

Complete.

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| 7. 2 min = <u>120</u> s              | 8. 30 h = <u>1</u> d <u>6</u> h |
| 9. 48 months = <u>4</u> years        | 10. 7 weeks = <u>49</u> d       |
| 11. 30 d = <u>4</u> weeks <u>2</u> d | 12. 180 min = <u>3</u> h        |
| 13. 3 d 8 h = <u>80</u> h            | 14. 1 year = <u>365</u> d       |



What would a 12-hour clock show for

- |  |   |   |
|--|---|---|
| 15. 03:00? <i>3:00 a.m.</i>                        | 16. 20:10? <i>8:10 p.m.</i>                         | 17. 14:40? <i>2:40 p.m.</i>                         |
| 18. 2 h 30 min later than 08:15? <i>10:45 a.m.</i> | 19. 4 h 20 min earlier than 13:40? <i>9:20 a.m.</i> | 20. 5 h 25 min earlier than 22:50? <i>5:25 p.m.</i> |

What would a 24-hour clock show for

- |  |   |  |
|--|---|--|
| 21. 12 noon? <i>12:00</i>                  | 22. 7:15 a.m.? <i>07:15</i>                         | 23. 9:30 p.m.? <i>21:30</i>                        |
| 24. 3 h later than 5:10 p.m.? <i>20:10</i> | 25. 2 h 15 min earlier than 1:30 p.m.? <i>11:15</i> | 26. 6 h 10 min later than 10:20 a.m.? <i>16:30</i> |

Use a ruler. Measure each in millimetres.

- |  |   |
|--|---|
| 27.  <i>45 mm</i> | 28.  <i>65 mm</i> |
|--|---|

Which unit, the millimetre, the centimetre, the metre, or the kilometre, is best for measuring

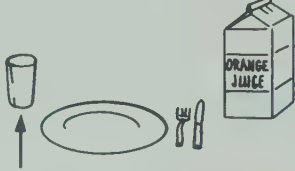
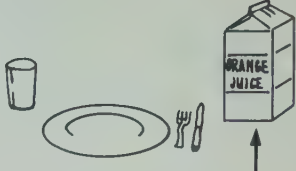

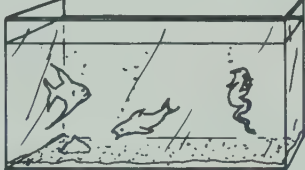

- |   |   |  |
|---|---|--|
| 29. the distance travelled by a hot-air balloon? <i>kilometre</i> | 30. the length of an eyelash? <i>centimetre</i> | 31. the height of a telephone pole? <i>metre</i> |
|---|---|--|

Choose the best estimate for

- |  |  |
|--|--|
| 32. the thickness of pencil lead.<br><div style="border: 1px solid black; padding: 2px; display: inline-block;">1 mm   5 mm   1 cm</div> <i>1 mm</i> | 33. the length of a hockey stick.<br><div style="border: 1px solid black; padding: 2px; display: inline-block;">2 cm   2 m   2 km</div> <i>2 m</i> |
| 34. the height of a foot stool.<br><div style="border: 1px solid black; padding: 2px; display: inline-block;">40 mm   40 cm   1 m</div> <i>40 cm</i> | 35. the width of a shoe.<br><div style="border: 1px solid black; padding: 2px; display: inline-block;">8 mm   8 cm   80 cm</div> <i>8 cm</i>       |

## Capacity in Millilitres and Litres

Which unit, the millilitre or the litre, is better for measuring the capacity of the following?

1.  litre	2.  millilitre	3.  litre
4.  millilitre	5.  litre	6.  litre


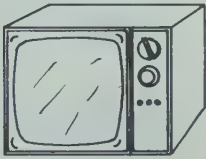




Use mL or L to complete each sentence.

7. Justin squeezed 30 mL of juice from the orange.

8. Pamela added 2 L of antifreeze to the car radiator.

## Mass in Grams and Kilograms

Which unit, the gram or the kilogram, is better for measuring the mass of the following?

1.  gram	2.  kilogram	3.  gram
4.  kilogram	5.  gram	6.  kilogram

Use g or kg to complete each sentence.

7. The box held 300 g of cereal.

8. Al's goal was to lose 1 kg each week.



## Millilitres and Litres

Complete.

1. 5 L 35 mL = <u>5035</u> mL 1 L = 1000 mL	2. 7895 mL = <u>7</u> L <u>895</u> mL 1000 mL = 1 L
3. 3 L = <u>3000</u> mL	4. 6450 mL = <u>6</u> L <u>450</u> mL

5. 8 L = 8000 mL

6. 4000 mL = 4 L

7. 9000 mL = 9 L

8. 2 L = 2000 mL

9. 3500 mL = 3 L 500 mL

10. 4 L 5 mL = 4005 mL

11. 5 L 350 mL = 5350 mL

12. 1950 mL = 1 L 950 mL

13. 2050 mL = 2 L 50 mL

14. 3 L 675 mL = 3675 mL

## Grams and Kilograms

Complete.

1. 6208 g = <u>6</u> kg <u>208</u> g 1000 g = 1 kg	2. 4 kg 500 g = <u>4500</u> g 1 kg = 1000 g
3. 2000 g = <u>2</u> kg	4. 7 kg 50 g = <u>7050</u> g

5. 5000 g = 5 kg

6. 3 kg = 3000 g

7. 6 kg = 6000 g

8. 9000 g = 9 kg

9. 1 kg 900 g = 1900 g

10. 4004 g = 4 kg 4 g

11. 3205 g = 3 kg 205 g

12. 8 kg 25 g = 8025 g

13. 5 kg 750 g = 5750 g

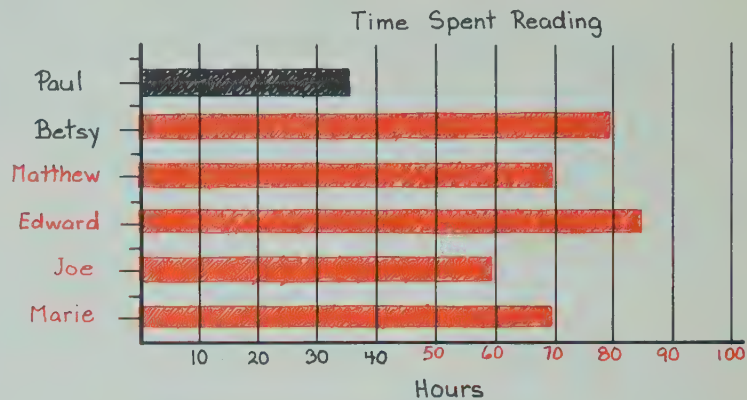
14. 2075 g = 2 kg 75 g

## Working with Graphs

Draw a graph for the information in each exercise.

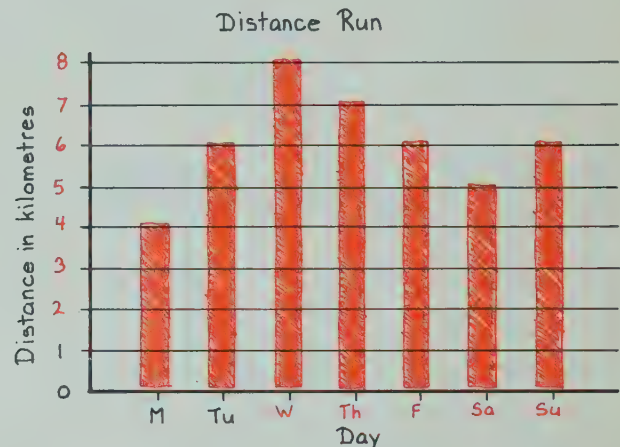
### 1. Time spent reading in one month

Paul	35 h
Betsy	80 h
Matthew	70 h
Edward	85 h
Joe	60 h
Marie	70 h



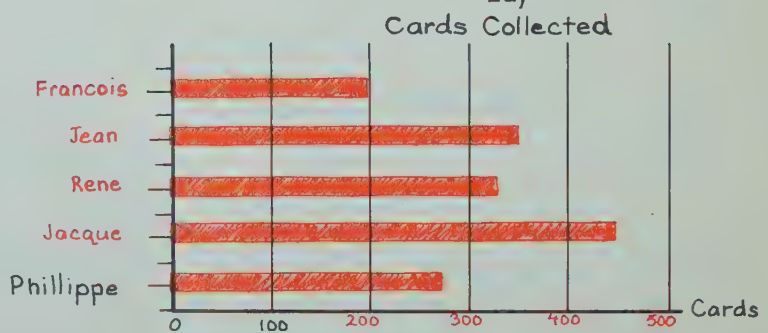
### 2. Distance run by Jan each day

Monday	4 km
Tuesday	6 km
Wednesday	8 km
Thursday	7 km
Friday	6 km
Saturday	5 km
Sunday	6 km



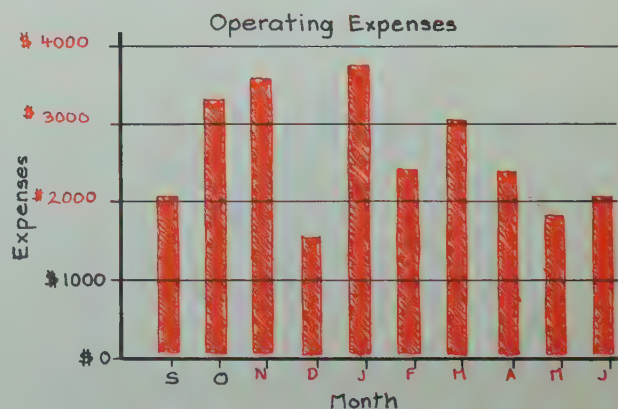
### 3. Number of hockey cards collected

Francois	200
Jean	350
Rene	325
Jacque	450
Phillippe	275



### 4. Operating expenses during school year

Sept.	\$2000	Feb.	\$2250
Oct.	\$3250	March	\$3000
Nov.	\$3500	April	\$2250
Dec.	\$1500	May	\$1750
Jan.	\$3750	June	\$2000



**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 13.78 \\ - 4.92 \\ \hline 8.86 \end{array}$$

$$\begin{array}{r} 2. \quad 231 \\ \quad 868 \\ + 914 \\ \hline 2013 \end{array}$$

$$\begin{array}{r} 3. \quad 5.8 \\ \times 6 \\ \hline 34.8 \end{array}$$

$$4. \quad 2 \overline{)846}^{423}$$

$$5. \quad 7 \overline{)420}^{60}$$

$$\begin{array}{r} 6. \quad 728 \\ \times 14 \\ \hline 10192 \end{array}$$

$$\begin{array}{r} 7. \quad 1600 \\ - 908 \\ \hline 692 \end{array}$$

$$\begin{array}{r} 8. \quad \$ 2.07 \\ \quad 18.21 \\ + 49.65 \\ \hline \$ 69.93 \end{array}$$

$$9. \quad 8 \overline{)712}^{89}$$

$$\begin{array}{r} 10. \quad 0.7 \\ \times 9 \\ \hline 6.3 \end{array}$$

$$11. \quad (627 - 483) \times 26$$

$$3744$$

$$12. \quad (897 - 147) \div 6$$

$$125$$

$$13. \quad \$10.66 - \$7.82$$

$$\$ 2.84$$

$$14. \quad 284 + 815 + 76$$

$$1175$$

$$15. \quad 41.28 + 16.94$$

$$58.22$$

$$16. \quad 42 \times 863$$

$$36246$$

Solve. Show your work.

17. The large fuel tank holds 8235 L. The smaller one holds 1075 L. Together, how much do they hold?  $9310 \text{ L}$

18. The total mass of the 4 hogs on the pickup truck is 772 kg. What is their average mass?  $193 \text{ kg}$

19. The whole trip will be 1000 km. One day 274 km were covered. The next day 317 km were travelled. How many kilometres remain?  $409$

20. Suzy watches the baker prepare muffins. Each pan contains 48 muffins. The pans are stacked 18 high on racks. How many muffins are on the racks?  $864$

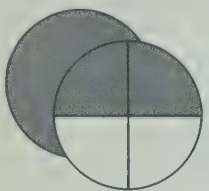
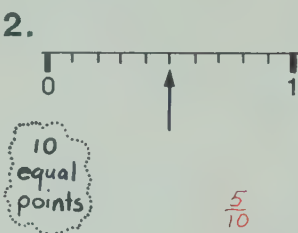


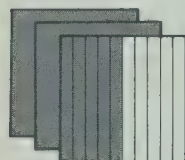


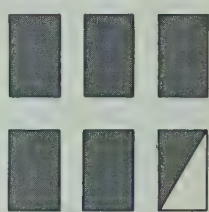

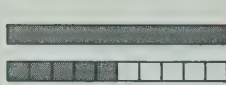
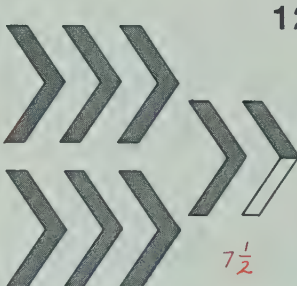

21. Six persons paint a house. They are paid \$500. The supplies cost \$50 and the rest they share equally. How much does each person get?  $\$ 75$

22. The first time the mouse went through the maze, it took 42.4 s. The tenth time through, it took 15.8 s. By how much had the mouse improved its time?  $26.6 \text{ s}$



## Equivalent Fractions for One-Half

Use  $\frac{1}{2}$ ,  $\frac{2}{4}$ , or  $\frac{5}{10}$  to write the numeral that matches each picture best.

1.  $1\frac{2}{4}$	2.  10 equal points $\frac{5}{10}$	3.  $2\frac{1}{2}$	4.  $6\frac{2}{4}$
5.  $2\frac{5}{10}$	6.  $3\frac{1}{2}$	7.  $4\frac{2}{4}$	8.  $5\frac{1}{2}$
9.  $\frac{2}{4}$	10.  $1\frac{5}{10}$	11.  $7\frac{1}{2}$	12.  $5\frac{5}{10}$

## Decimal Names for One-Half

Write each of these as a decimal

showing tenths.

1.  $3\frac{1}{2}$  3.5 | 2. 3.50 3.5

3.  $6\frac{1}{2}$  6.5

4. 0.50 0.5

5.  $\frac{1}{2}$  0.5

showing hundredths.

6.  $2\frac{1}{2}$  2.50 | 7. 0.5 0.50

8. 1.5 1.50

9.  $3\frac{1}{2}$  3.50

10.  $\frac{1}{2}$  0.50

Write each of these using the fraction  $\frac{1}{2}$ .

11. 16.5  $16\frac{1}{2}$

12. 0.50  $\frac{1}{2}$

13. 4.5  $4\frac{1}{2}$

14. 1.50  $1\frac{1}{2}$

15. 9.50  $9\frac{1}{2}$

## Fourths and Quarters

Complete each chart.

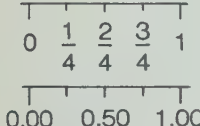
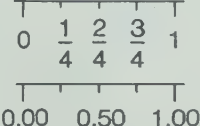
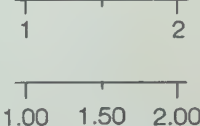
dollars   quarters   value	dollars   quarters   value	dollars   quarters   value
1.     1            2 <u>\$1.50</u>	2.     2            1 <u>\$2.25</u>	3. <u>0</u> <u>3</u> \$0.75
fraction (fourths)   decimal	fraction (fourths)   decimal	fraction (fourths)   decimal
4. $1\frac{2}{4}$ <u>1.50</u>	5. $3\frac{3}{4}$ <u>3.75</u>	6. $\frac{1}{4}$ 0.25

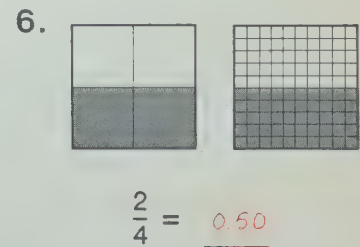
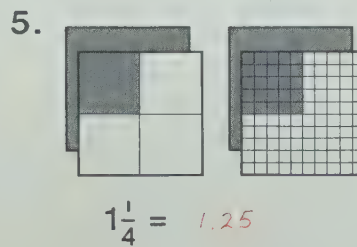
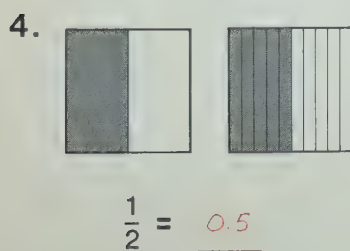
dollars	quarters	value	dollars	quarters	value	dollars	quarters	value			
7.	1	3	<u>\$1.75</u>	8.	<u>      </u> <u>1</u>	\$0.25	9.	0	2	<u>\$0.50</u>	
dollars	quarters	value	dollars	quarters	value	dollars	quarters	value			
10.	<u>3</u>	<u>3</u>	\$3.75	11.	1	1	<u>\$1.25</u>	12.	<u>2</u>	<u>2</u>	\$2.50
fraction (fourths)	decimal		fraction (fourths)	decimal		fraction (fourths)	decimal				
13.	<u>2 <math>\frac{2}{4}</math></u>	2.50	14.	$\frac{3}{4}$	<u>0.75</u>	15.	<u>4 <math>\frac{1}{4}</math></u>	4.25			

SPM4/U13/298-299

## Equivalent Fractions and Decimals

Write a decimal or fraction to complete each sentence.

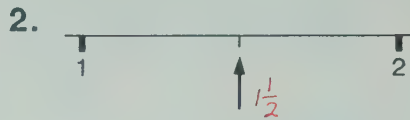
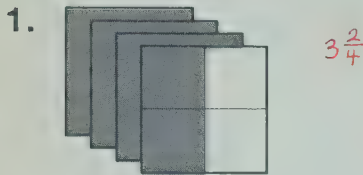
1.  $\frac{2}{4} = \underline{0.50}$	2.  $\frac{1}{4} = \underline{0.25}$	3.  $1.50 = \underline{1\frac{1}{2}}$
---	---	--



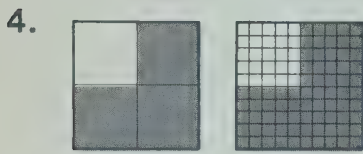
7. $2\frac{3}{10} = \underline{2.3}$	8. $1\frac{3}{4} = \underline{1.75}$	9. $2.25 = \underline{2\frac{1}{4}}$	10. $0.75 = \underline{\frac{3}{4}}$
11. $6.50 = \underline{6\frac{1}{2}}$	12. $0.5 = \underline{\frac{1}{2}}$	13. $4\frac{1}{4} = \underline{4.25}$	14. $4.75 = \underline{4\frac{3}{4}}$

## Practice

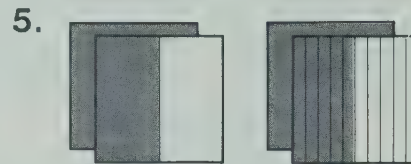
Use  $\frac{1}{2}$ ,  $\frac{2}{4}$ , or  $\frac{5}{10}$  to write the numeral that matches each picture best.



Write the decimal that matches the picture and completes the sentence.



$$\frac{3}{4} = \underline{0.75}$$



$$1\frac{1}{2} = \underline{1.5}$$

Write each of these as a decimal showing tenths.

6.  $3\frac{1}{2}$   $3.5$

7.  $\frac{3}{10}$   $0.3$

8.  $1\frac{6}{10}$   $1.6$

9.  $\frac{1}{2}$   $0.5$

Write each of these as a decimal showing hundredths.

10.  $4\frac{1}{2}$   $4.50$

11.  $1\frac{3}{4}$   $1.75$

12.  $2.5$   $2.50$

13.  $\frac{1}{4}$   $0.25$

Write a fraction to complete each sentence.  
Use fourths or one-half when possible.

14.  $5.50 = \underline{5\frac{1}{2}}$

15.  $3.25 = \underline{3\frac{1}{4}}$

16.  $0.9 = \underline{\frac{9}{10}}$

17.  $1.75 = \underline{1\frac{3}{4}}$

18. \$0.50 is  $\underline{\frac{1}{2}}$  the value of 1 dollar.

19. The value of 3 quarters is  $\underline{\frac{3}{4}}$  the value of 1 dollar.

Complete the chart.

	Bills and Coins	Value
20.	2 dollars and 3 quarters	$\underline{\$2.75}$
21.	<u>1</u> dollar and <u>2</u> quarters	$\underline{\$1.50}$
22.	3 dollars and 1 quarter	$\underline{\$3.25}$
23.	<u>0</u> dollars and <u>3</u> quarters	$\underline{\$0.75}$
24.	5 dollars and 2 quarters	$\underline{\$5.50}$
25.	<u>2</u> dollars and <u>1</u> quarter	$\underline{\$2.25}$

## Comparing and Ordering Fractions

Use  $>$  or  $<$  to make a true statement.

1. $\frac{2}{4} \geq \frac{1}{10}$	2. $\frac{1}{2} < \frac{3}{4}$	3. $\frac{1}{4} < \frac{1}{2}$	4. $\frac{6}{10} < \frac{9}{10}$
------------------------------------	--------------------------------	--------------------------------	----------------------------------

5.  $\frac{6}{10} < \frac{3}{4}$

6.  $\frac{1}{2} < \frac{9}{10}$

7.  $\frac{2}{4} > \frac{2}{10}$

8.  $\frac{3}{4} > \frac{2}{4}$

9.  $\frac{5}{10} < \frac{3}{4}$

List in order from least to greatest.

10.  $\frac{1}{2}, \frac{3}{4}, \frac{1}{4}, \frac{1}{10}$   $\frac{1}{10}, \frac{1}{4}, \frac{1}{2}, \frac{3}{4}$

11.  $\frac{2}{4}, \frac{1}{10}, \frac{4}{10}, \frac{9}{10}$   $\frac{1}{10}, \frac{4}{10}, \frac{2}{4}, \frac{9}{10}$




12.  $\frac{6}{10}, \frac{1}{2}, \frac{1}{4}, \frac{2}{10}$   $\frac{2}{10}, \frac{1}{4}, \frac{1}{2}, \frac{6}{10}$

13.  $\frac{3}{4}, \frac{9}{10}, \frac{7}{10}, \frac{1}{2}$   $\frac{1}{2}, \frac{7}{10}, \frac{3}{4}, \frac{9}{10}$

SPM4/U13/302-303

## Fraction Names for 1

Draw a shape for 1 *Shapes will vary.*

1. if  is $\frac{1}{4}$ .	2. if  is $\frac{1}{4}$ .	3. if  is $\frac{1}{10}$ .
--	--	---

4. if  is  $\frac{1}{2}$ .

5. if  is  $\frac{1}{4}$ .

6. if  is  $\frac{1}{10}$ .

7. if  is  $\frac{1}{4}$ .

8. if  is  $\frac{1}{2}$ .

9. if  is  $\frac{1}{4}$ .



## Adding Fractions

Add. Check by using decimals.

1. $1\frac{2}{10}$ $3\frac{7}{10}$ <hr/> $4\frac{9}{10}$ 1.2 3.7 <hr/> 4.9	2. $2\frac{1}{2}$ $3\frac{1}{2}$ <hr/> $6$ (or $5\frac{2}{2}$ ) 2.5 3.5 <hr/>	3. $3\frac{2}{4}$ $5\frac{1}{4}$ <hr/> $8\frac{3}{4}$	4. $2 + 2\frac{1}{4}$ $4\frac{1}{4}$
---	---	---	--------------------------------------

5.  $\frac{1}{4}$   
 $\frac{2}{4}$   

---

 $\frac{3}{4}$

6.  $1\frac{3}{10}$   
 $4\frac{7}{10}$   

---

 $6$  (or  $5\frac{10}{10}$ )

7.  $5\frac{1}{2}$   
 $\frac{2}{7\frac{1}{2}}$

8.  $2\frac{5}{10}$   
 $4\frac{1}{10}$   

---

 $6\frac{6}{10}$

9.  $2\frac{1}{4}$   
 $6\frac{1}{4}$   

---

 $8\frac{2}{4}$  (or  $8\frac{1}{2}$ )

10.  $6 + 1\frac{3}{4}$   $7\frac{3}{4}$

11.  $8\frac{1}{10} + 4\frac{2}{10}$   $12\frac{3}{10}$

12.  $\frac{1}{2} + \frac{1}{2}$   $1$  (or  $\frac{2}{2}$ )

13.  $7\frac{8}{10} + 3\frac{2}{10}$   $11$   
(or  $10\frac{10}{10}$ )

14.  $2\frac{5}{10} + 1\frac{5}{10}$   $4$   
(or  $3\frac{10}{10}$ )

15.  $4\frac{3}{4} + 3\frac{1}{4}$   $8$   
(or  $7\frac{4}{4}$ )

SPM4/U13/306-307

## Subtracting Fractions

Subtract. Check by using decimals.

1. $6\frac{4}{10}$ $3\frac{1}{10}$ <hr/> $3\frac{3}{10}$ 6.4 3.1 <hr/> 3.3	2. $6$ $4\frac{3}{10}$ <hr/> $1\frac{7}{10}$ 6.0 4.3 <hr/>	3. $6\frac{2}{10}$ $1\frac{1}{10}$ <hr/> $5\frac{1}{10}$	4. $5\frac{2}{4} - 1\frac{1}{4}$ $4\frac{1}{4}$
---	---	--	---

5.  $6$   
 $5\frac{3}{4}$   

---

 $\frac{1}{4}$

6.  $8\frac{8}{10}$   
 $3\frac{3}{10}$   

---

 $5\frac{5}{10}$  (or  $5\frac{1}{2}$ )

7.  $2$   
 $\frac{6}{10}$   

---

 $1\frac{4}{10}$

8.  $3\frac{3}{4}$   
 $\frac{1}{2\frac{3}{4}}$

9.  $2\frac{1}{2}$   
 $1\frac{1}{2}$   

---

 $1$

10.  $5\frac{9}{10} - 4\frac{1}{10}$   $1\frac{8}{10}$

11.  $6\frac{3}{4} - 2\frac{1}{4}$   $4\frac{2}{4}$  (or  $4\frac{1}{2}$ )

12.  $6 - 1\frac{1}{4}$   $4\frac{3}{4}$

13.  $4\frac{3}{10} - 3$   $1\frac{3}{10}$

14.  $4 - \frac{1}{2}$   $3\frac{1}{2}$

15.  $7 - 5\frac{5}{10}$   $1\frac{5}{10}$  (or  $1\frac{1}{2}$ )

**Practice**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 3\frac{1}{4} \\ + 2\frac{2}{4} \\ \hline 5\frac{3}{4} \end{array}$$

$$\begin{array}{r} 2. \quad \$4.37 \\ \times \quad 8 \\ \hline \$34.96 \end{array}$$

$$3. \quad 7 \overline{)357} \begin{array}{l} 51 \end{array}$$

$$\begin{array}{r} 4. \quad 4\frac{7}{10} \\ - 1\frac{3}{10} \\ \hline 3\frac{4}{10} \end{array}$$

$$\begin{array}{r} 5. \quad 63.21 \\ + 19.48 \\ \hline 82.69 \end{array}$$

$$\begin{array}{r} 6. \quad 3.9 \\ \times \quad 5 \\ \hline 19.5 \end{array}$$

$$\begin{array}{r} 7. \quad 5 \\ - 3\frac{1}{2} \\ \hline 1\frac{1}{2} \end{array}$$

$$8. \quad 3 \overline{) \$915} \begin{array}{l} \$305 \end{array}$$

$$\begin{array}{r} 9. \quad 462 \\ \times \quad 33 \\ \hline 15246 \end{array}$$

$$\begin{array}{r} 10. \quad \$14.86 \\ - \quad 7.93 \\ \hline \$ \quad 6.93 \end{array}$$

$$11. \quad 3\frac{3}{10} + 6\frac{2}{10} \\ \quad \quad \quad 9\frac{5}{10}$$

$$12. \quad 279 \div 9 \\ \quad \quad \quad 31$$

$$13. \quad 406 - 27 \\ \quad \quad \quad 379$$

$$14. \quad (314 - 281) \times 35 \\ \quad \quad \quad 1155$$

$$15. \quad 14 \times \$8.06 \\ \quad \quad \quad \$112.84$$

$$16. \quad 614 + 28 + 1914 \\ \quad \quad \quad 2556$$

Solve. Show your work.

17. Mr. Derrin's garden is 8 m wide and 14 m long. How many metres of fence will be needed to go around it? **44**

18. A tweed material Mrs. Brun likes costs \$12 per square metre. She needs 2.6 m<sup>2</sup>. How much will this cost? **\$31.20**

19. Mill Village has 3 mail routes. One has 128 boxes. Another has 273 boxes. The third has 185 boxes. Altogether, how many mail boxes are there in Mill Village? **586**

20. Pauline is deciding between a 10-speed and a 5-speed bicycle. The 10-speed costs \$136.65. The 5-speed is \$41.95 less. How much does the 5-speed bicycle cost? **\$94.70**

21. 645 copies of the school newspaper are to be divided equally among 3 locations. How many will each have? **215**

22. The feedstore has a stack of 180 bags of feed. Each bag holds 25 kg. How many kilograms of feed are there in all? **4500 kg**

# Checking Up -- Addition, Subtraction, Multiplication

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 53 \\ + 24 \\ \hline 77 \end{array}$$

$$\begin{array}{r} 2. \quad 957 \\ - 642 \\ \hline 315 \end{array}$$

$$\begin{array}{r} 3. \quad 60 \\ \times 3 \\ \hline 180 \end{array}$$

$$\begin{array}{r} 4. \quad 63 \\ - 38 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 5. \quad 36 \\ \times 8 \\ \hline 288 \end{array}$$

$$\begin{array}{r} 6. \quad 467 \\ + 371 \\ \hline 838 \end{array}$$

$$\begin{array}{r} 7. \quad 670 \\ - 276 \\ \hline 394 \end{array}$$

$$\begin{array}{r} 8. \quad 85 \\ \times 5 \\ \hline 425 \end{array}$$

$$\begin{array}{r} 9. \quad 359 \\ + 168 \\ \hline 527 \end{array}$$

$$\begin{array}{r} 10. \quad 900 \\ - 472 \\ \hline 428 \end{array}$$

$$\begin{array}{r} 11. \quad 400 \\ \times 9 \\ \hline 3600 \end{array}$$

$$\begin{array}{r} 12. \quad 1274 \\ + 1789 \\ \hline 3063 \end{array}$$

$$\begin{array}{r} 13. \quad 748 \\ \times 7 \\ \hline 5236 \end{array}$$

$$\begin{array}{r} 14. \quad 6614 \\ - 1936 \\ \hline 4678 \end{array}$$

$$\begin{array}{r} 15. \quad 27 \\ \times 60 \\ \hline 1620 \end{array}$$

$$\begin{array}{r} 16. \quad \$6.84 \\ + 5.17 \\ \hline \$12.01 \end{array}$$

$$\begin{array}{r} 17. \quad \$2.85 \\ \times 4 \\ \hline \$11.40 \end{array}$$

$$\begin{array}{r} 18. \quad \$17.32 \\ - 8.37 \\ \hline \$ 8.95 \end{array}$$

$$\begin{array}{r} 19. \quad \$46.00 \\ - 36.84 \\ \hline \$ 9.16 \end{array}$$

$$\begin{array}{r} 20. \quad \$28.57 \\ + 44.96 \\ \hline \$73.53 \end{array}$$

$$\begin{array}{r} 21. \quad 47 \\ \times 58 \\ \hline 2726 \end{array}$$

$$\begin{array}{r} 22. \quad 39.5 \\ + 57.5 \\ \hline 97.0 \end{array}$$

$$\begin{array}{r} 23. \quad 1425 \\ \quad 938 \\ + 2647 \\ \hline 5010 \end{array}$$

$$\begin{array}{r} 24. \quad 20.2 \\ - 1.9 \\ \hline 18.3 \end{array}$$

$$\begin{array}{r} 25. \quad 297 \\ \times 39 \\ \hline 11583 \end{array}$$

Solve. Show your work.

26. Hayley's Store ordered 75 cartons of sugar with 8 bags in each carton. How many bags of sugar did it order? **600**

27. The Fire Department reported 2032 calls for the year, of which 475 were false alarms. How many calls were not false alarms? **1557**

28. Meredith paid \$32.50, \$26.75, and \$19.45 to the three part-time helpers. How much did she pay the part-time helpers in all? **\$78.70**

29. The building plans show 24 groups of new houses with 16 houses in each group. How many new houses do the building plans show? **384**

**Checking Up -- Computation**

Perform the indicated operation.

$$\begin{array}{r} 1. \quad 513 \\ + 145 \\ \hline 658 \end{array}$$

$$\begin{array}{r} 2. \quad 84 \\ \times 6 \\ \hline 504 \end{array}$$

$$\begin{array}{r} 213 \\ 3 \overline{)639} \end{array}$$

$$\begin{array}{r} 4. \quad 698 \\ - 462 \\ \hline 236 \end{array}$$

$$\begin{array}{r} 5. \quad 748 \\ \times 3 \\ \hline 2244 \end{array}$$

$$\begin{array}{r} 6. \quad 3864 \\ + 769 \\ \hline 4633 \end{array}$$

$$\begin{array}{r} 23 \\ 4 \overline{)92} \end{array}$$

$$\begin{array}{r} 8. \quad 25.9 \\ \times 8 \\ \hline 207.2 \end{array}$$

$$\begin{array}{r} 9. \quad \$67.59 \\ + 24.89 \\ \hline \$92.48 \end{array}$$

$$\begin{array}{r} 10. \quad 2000 \\ - 1571 \\ \hline 429 \end{array}$$

$$\begin{array}{r} 11. \quad 96 \\ \times 70 \\ \hline 6720 \end{array}$$

$$\begin{array}{r} 12. \quad 336.2 \\ - 86.9 \\ \hline 249.3 \end{array}$$

$$\begin{array}{r} 13. \quad \$6.98 \\ \times 5 \\ \hline \$34.90 \end{array}$$

$$\begin{array}{r} 36 \\ 7 \overline{)252} \end{array}$$

$$\begin{array}{r} 15. \quad 75 \\ \times 94 \\ \hline 7050 \end{array}$$

$$\begin{array}{r} 16. \quad \$90.63 - \$53.96 \\ \hline \$36.67 \end{array}$$

$$\begin{array}{r} 17. \quad 162 \div 6 \\ \hline 27 \end{array}$$

$$\begin{array}{r} 18. \quad 6 \times 6 \times 7 \\ \hline 252 \end{array}$$

$$\begin{array}{r} 19. \quad 528 \div 8 \\ \hline 66 \end{array}$$

$$\begin{array}{r} 20. \quad 74 \times 375 \\ \hline 27750 \end{array}$$

$$\begin{array}{r} 21. \quad 420.7 + 82.3 + 99.2 \\ \hline 602.2 \end{array}$$

Solve. Show your work.

22. Phillip paid the \$12.99 bill with a \$20 bill. How much change did he receive? \$ 7.01

23. Laurie placed 125 apples in 5 bags with the same number in each bag. How many were in each bag? 25

24. Ted filled 38 cartons with two dozen eggs each. How many eggs were in the cartons? 912

25. The grocery items cost \$2.89, \$0.77, and \$3.89. How much did the three items cost in all? \$ 7.55



## Checking Up -- Numeration

Write in standard form.

1. sixty-nine thousand forty-one  $69\,041$

2. seven and five-eighths  $7\frac{5}{8}$

3.  $70\,000 + 800 + 20$   $70\,820$

4. forty-eight and seventy-five hundredths  $48.75$

5. three-fifths  $\frac{3}{5}$

6. two and eight-hundredths  $2.08$

Use  $>$ ,  $<$ , or  $=$  to make a true statement.

7.  $77\,535 > 77\,355$

8.  $206\,370 < 263\,070$

9.  $689\,768 < 689\,786$

10.  $4.3 = 4.30$

11.  $17.08 < 17.74$

12.  $29.3 > 29.2$

13.  $\frac{1}{2} < \frac{2}{3}$

14.  $1 = \frac{5}{5}$

15.  $\frac{3}{4} < 0.76$

List in order from least to greatest.

16.  $3.85, 3.08, 3.50, 38.5, 3.58, 3.80$   $3.08, 3.50, 3.58, 3.80, 3.85, 38.5$

17.  $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{2}{3}, \frac{3}{4}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5}$   $\frac{1}{5}, \frac{1}{4}, \frac{1}{3}, \frac{2}{5}, \frac{1}{2}, \frac{3}{5}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}$

18.  $108\,909, 180\,980, 108\,908, 109\,801, 108\,918, 108\,009$   
 $108\,009, 108\,908, 108\,909, 108\,918, 109\,801, 180\,980$

Round to the

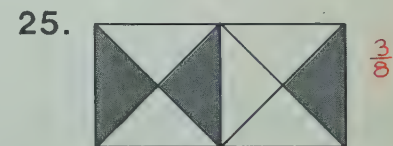
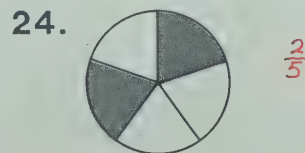
19. nearest ten:  $3675$   $3680$

20. nearest thousand:  $29\,704$   $30\,000$

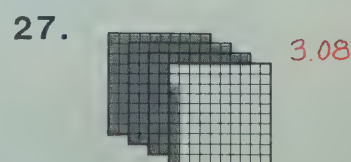
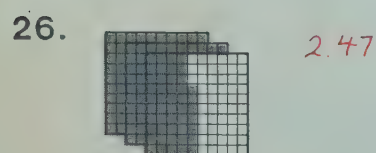
21. nearest hundred:  $6845$   $6800$

22. nearest whole number:  $23.18$   $23$

Write a fraction to show how much is shaded.



Write a decimal to show how much is shaded.



## Checking Up -- Measurement

Complete.

1. 2 km = 2000 m
2. 128 cm = 1 m 28 cm
3. 2 L 89 mL = 2089 mL
4. 6280 mL = 6 L 280 mL
5. 3000 g = 3 kg
6. 1 kg 14 g = 1014 g
7. 4 m = 400 cm
8. 1 h 10 min = 70 min
9. 4 min 20 s = 260 s
10. 1 dollar 12 dimes are worth \$ 2.20.
11. 3 dollars 5 dimes 17 pennies are worth \$ 3.67.
12. 2 dollars 18 dimes 15 pennies are worth \$ 3.95.

Which unit of length, the millimetre, the centimetre, the metre, or the kilometre is best for measuring

13. the length of a newborn baby? centimetre
14. the width of a baby's fingernail? millimetre
15. the distance from your home to the centre of town? kilometre
16. the width of a road? metre

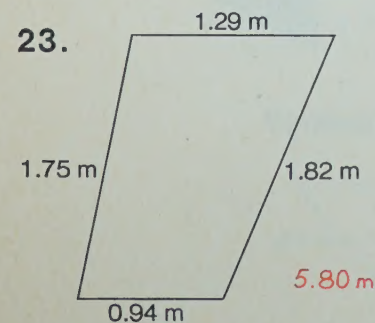
Choose the best estimate for

17. the mass of a pigeon. 1 g, 1 kg, 10 kg 1 kg
18. the width of a dime. 2 mm, 2 cm, 2 m 2 cm
19. the capacity of a thimble. 2 L, 20 mL, 2 mL 2 mL

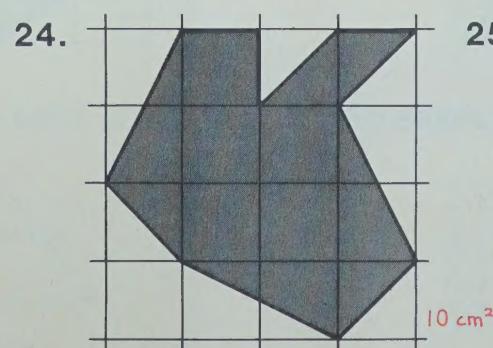
Complete.

20. The mass of my pencil is about 15 g.
21. The school doorway is about 3 m tall.
22. The orange juice pitcher holds about 2 L of juice.

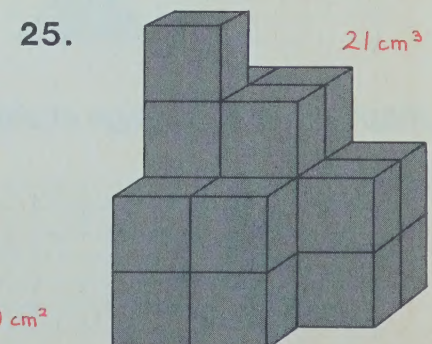
Find the perimeter.



Give the area in square centimetres.



Give the volume in cubic centimetres.





NAME \_\_\_\_\_

QA 135-5 S79 1982 GR-4 WKBK-  
TCH-ED-  
STARTING POINTS IN MATHEMATICS/  
/REV --

39584808 CURR

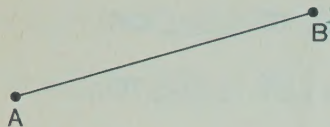
LIBRARY USE ONLY

\*000011546637\*

## Checking Up -- Geometry

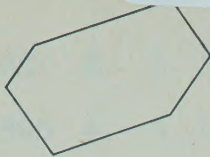
Complete each sentence.

1.



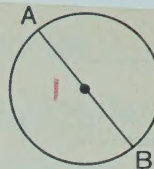
$\overline{AB}$  is  
a line segment.

2.



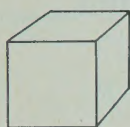
This polygon  
is a hexagon.

3.



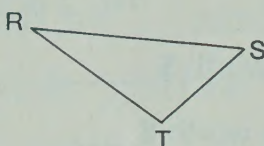
$\overline{AB}$  is a diameter  
of the circle.

4.



A cube has 6 faces.  
Each has  
the shape of a square.

5.



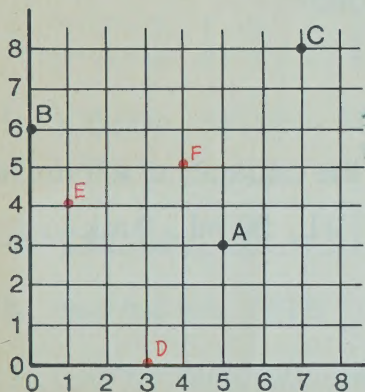
A name for this  
triangle is triangle RST.

6.



This pyramid has  
8 edges and  
5 vertices.

Use the grid for Exercises 7-12. Write a number pair for



7. point A. (5, 3)

8. point B. (0, 6)

9. point C. (7, 8)

Show on the grid the point named by

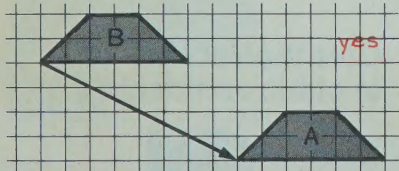
10. (3, 0). Call it D.

11. (1, 4). Call it E.

12. (4, 5). Call it F.

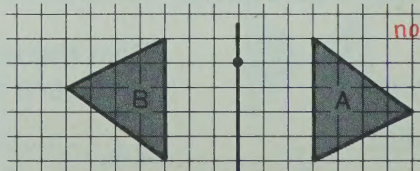
Is shape A the slide image of shape B?

13.



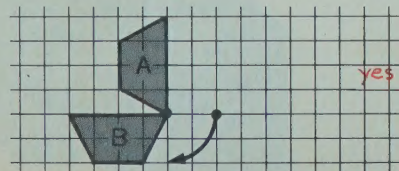
Is shape A the flip image of shape B?

14.



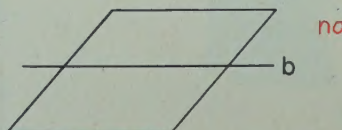
Is shape A the turn image of shape B?

15.



Is line b a line of symmetry?

16.





For a lesson like the one shown, have students who exhibit difficulty in understanding the material in the textbook proceed through the *diagnostic/instruction box* using the *completely-worked example* for review. Go over the example with students individually. Have them verbalize their understanding of the process involved. Then have them proceed through a solution of the *partially-worked example* while you watch and listen. Check their understanding by having them complete the *decision exercises* in the diagnostic/instruction box on their own. Use their performance on these exercises as a basis for deciding whether they have grasped the required concept or skill to continue on the remaining exercises, or whether more help is necessary such as that provided in the *Starting Points in Mathematics Reteaching Blackline Masters*.

One diagnostic/instruction box is provided with every lesson that relates to a textbook lesson. A completely-worked example is a feature in most of these boxes. When the task requires a rather "large" response, however, such as in the creation of a graph, the first exercise may be only partially complete. After discussing the work shown for such an exercise, have the students complete the exercise for a check of their understanding while you watch and listen.

For some lessons, such as those which develop concepts rather than skills, there may be no partially-worked example following the first completed example. For such lessons the student simply proceeds to the other exercises in the diagnostic/instruction box following your initial review with them of the worked example and their verbalization of the concepts involved. For these exercises, you may wish to have them justify their responses verbally as they proceed while you listen and watch.

Space for student answers is provided after or below each exercise. This positioning is usually suggested by what is shown in the worked examples.

QA 135.5 S79 1982

gr.4 wkbk. tch.ed.

Starting points in mathematics

/

39584808 CURR

RECOMMENDED FOR USE  
IN ALBERTA SCHOOLS



University of Alberta Library



0 1620 1084 7042

B40010



GINN AND COMPANY  
EDUCATIONAL PUBLISHERS

C95137  
ISBN 0-7702-0847-9